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# THE MARYLAND FARMER:

DEVOTED TO

*Agriculture, Horticulture, Rural Economy & Mechanic Arts.*

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## THE CROPS.

From all parts of the United States the report of the crops indicates an enormous yield, whilst in many instances the product is said to be almost unprecedented. We have examined carefully into the matter, and we find that in Maryland, except in a few districts, the same favorable condition of things exists. North, South, East and West, the information published by the Agricultural Bureau and through the columns of the newspapers is of the same tenor. Even where danger in many instances was apprehended to the wheat crop from the weevil, the scab and the rust; but the singularly favorable weather that followed the heavy rains just preceding harvest agreeably disappointed the expectations of the farmers, and when the crops were cut the grain was almost invariably found to yield well, and to be plump and heavy. Oats and corn, though backward, promise equally well; whilst the hay crop—pushed forward by frequent rains and the evaporation from the soil regulated and partly suppressed by cool weather—has been enormous. Contrary to the general impression also, there were unusually large breadths of land seeded down in the autumn to wheat and rye, and in the spring to corn, oats, barley and potatoes. Even at the South the product has been good, and the serious danger of a continuance of the famine in that section is now removed. All this has come providentially to pass in spite of a disorganized labor system and political troubles exacerbated by sectional feeling. With taxes of every description weighing heavily upon the producing interests, joined to the high prices of labor—the inevitable result of taxation—any deficiency of the crops might have brought about a revulsion that would have been felt from one end of the country to the other. As it is, this peril has been at least temporarily diverted, and the prosperity of our rural population will react upon and relieve to a very considerable extent the commercial depression under which the dwellers in cities have been laboring. We do not suppose, however, even for a moment, that any permanent change for the better can be brought

about until the clouds that still darken the political sky are dispersed and the uneasiness in regard to the future that now prevails in all parts of the land gives place to a general and a generous confidence. When this will happen no man at present can tell, and, in the meantime, much wisdom will be found in the suggestion of Sydney Smith, to “take short views of things.” To be troubled about remote matters and about things that may never come to pass is to fret and worry without just cause. To do our duty manfully in the sphere in which we are called to act, and to make the best of a condition of affairs that has been brought about by causes beyond our control is the true philosophy of life. Any nettle, no matter what form that nettle may take, whether it be in the form of trouble in the household, or of trouble outside of the household, can be deprived of its power to sting us, as the old song very wisely says, by grasping it firmly. It will take years before our labor system can be brought into a satisfactory condition, and from the changes that have been brought about in the border and slave States in the relations previously existing between the white and black races, it is doubtful whether the latter can ever be depended on as good and trustworthy field hands. Two things will, however, tend very much to make up for this deficiency, and may eventually be found combined to form an adequate remedy. The first is the necessity which is now imposed upon the farmer to substitute labor-saving machines for field hands to the utmost possible extent, and the other, to offer facilities for the introduction of the best class of agricultural laborers from Europe. But these are matters for the future—at present, looking to the extent of land seeded down to cereals last autumn and spring, and to the abundance of the crops, we should say that, contrary to what is usually the case, the earlier the crops are brought to market the better prices they will bring. In the Middle States the old supplies have been nearly, if not quite, exhausted, and until the market becomes glutted with the products of the recent harvest, prices must rule tolerably high. As soon, however, as the general crop is forwarded there will necessarily occur a

break in prices, and those who are the tardiest in profiting by the present demand will fare the worst. The true policy, therefore, of the farmer this year is to sell his crop early—the earlier the better. Occasionally it happens that prices go up, because of a large demand for foreign export, but this year the crops in Europe promise to be as abundant as they are with us at home. Besides this, the influence of our currency has carried up prices beyond the point at which it is profitable to export breadstuffs and provisions, and we are, therefore, from this circumstance alone, deprived of the ability compete with the grain growing regions of the Baltic and the Black Sea.—The market for home consumption is therefore the only market to which our farmers can look with any degree of certainty, and whilst we think that the cost of field labor, heavy taxes, and the high price of all foreign and manufactured articles that enter into the consumption of the country, will tend to keep up to some extent the price of food, we are clear in the belief that, with the superabundance of the present year, the highest price of the season for all kinds of cereals will be obtained by those who bring them forward earliest.

#### Preventive Against the Turnip Fly.

We quote from the *North British Agriculturist* the following recommendations respecting the methods of preventing or mitigating the risk of damage by the Turnip Fly:

“Various methods have been suggested to prevent the attacks of the turnip fly when the plants are newly braided. Steeping the seed in oil, and afterwards dusting the seed with sulphur preparatory to sowing, has been found to be of considerable service. There is, however, a still more certain method of preventing. Newly-slacked lime, strewn thinly along the rut made by the seed-coulter of the sowing machine at the time of the braiding the plants, proves a protection. We have also found a mixture of lime and soot very effectual in protecting the young plants as they put out the first leaves. When a small quantity of white turnip seed is sown in the hollows of the drills, the insects resort to the white turnip plants, preferring them to the Swede. This method of protecting the latter is more expensive than top-dressing the seed rows with lime previous to the braiding of the plants. After the rough leaves are formed, little damage is caused by the turnip fly, but other insects feed on the leaves, the black beetle being the most common. The most effectual means to combat all insects is to push forward the growth of the plants by manures applied at the time the seed is sown, and after the plants come up to stir the surface frequently, but without injury to the turnip plants.”

#### CONCERNING PEACH ORCHARDS.

There is great complaint made in Delaware and New Jersey and in certain parts of Maryland, especially in those districts where the peach was at one time largely and profitably cultivated, that the peach trees are dying out. The prevailing disease is the yellows, and for this no adequate remedy appears to be known. Without venturing to speak authoritatively on the subject, we are inclined to believe that the many failures of peach orchards with us have arisen from careless cultivation rather than from any other cause. We know there are some descriptions of soil on which the peach cannot be grown to advantage. But on the soils that are usually well adapted to their growth—the sandy and light loamy and gravelly soils—they ought to flourish now quite as well as they did years ago. Two causes have co-operated in injuring the permanence of our peach orchards—the first being the common custom of planting only grafted trees, and the other the rapid impoverishment of the soil where peach orchards have been established. The graft in our opinion partakes largely of the nature of the parent stock, and if that is diseased the graft will also be sickly likewise.—There are a few orchards known to us which are entirely of seedling fruit, and although it requires more pains when the trees are in the nursery to discriminate between those that will bear large, pulpy fruit, and those that produce nothing better than the commonest kind, yet a careful study of the leaf of the tree will indicate whether the fruit which the tree will bear will be excellent or worthless. If the seeds of choice fruit have been planted, the chances are that trees bearing similarly choice fruit will be the result. It has been so with us in a majority of instances, and we see no reason why it should not be so with others. Seedling trees are invariably longer lived than grafted trees, and are subject to fewer diseases. But no peach orchard will be vigorous for many years unless it is well attended to. The trees must be regularly examined twice a year for worms at the base of the tree, and the worms cut out from the bark, or they will girdle it and the tree will die. The orchard must be ploughed regularly every spring, and no clover or grass suffered to grow up among the trees or they will be seriously injured thereby, and the fruit will ripen badly. Hoed crops, well manured, may be planted in a young peach orchard not only without danger, but to the manifest advantage of the trees; but these hoed crops should be restricted to turnips, beets and potatoes. Corn grows too close, covers the ground too much, and robs the soil of so large a portion of the potash that its cultivation in a peach orchard should be avoided.—Nevertheless every peach orchard should be broken up with the plough each spring, and if not cultivated



in light hoed crops should be left fallow. But herein lies the cause of the rapid deterioration of the soil that is best adapted to the growth of the peach in our climate. All such soils are of light texture, and the constant exposure year after year of the raw earth to the hot suns and heavy rains is certain to exhaust it of those substances that constitute the chief nutriment of the peach trees. In soils containing potash and the phosphates the peach thrives. But potash and the phosphates are readily exhausted by hot suns and leaching rains, and as they fail the peach tree languishes. An annual broadcasting of bone dust and wood ashes would be found of immense service in supplying the annual loss, and would render the same land capable of bearing peaches for many years. An instance in illustration of this fact is within our own knowledge and may be cited here. A peach orchard twelve years old came into possession of a new proprietor. The orchard showed signs of failing, and he was warned by the neighbors that he had better commence planting a new orchard, as the old one would not live more than a year or two longer. He thought the matter over, and finally concluded he would try an experiment. He caused the ground to be broken up deeply in the fall, and just before winter set in he removed the earth for a foot in depth around the root of each tree, and in the basin so formed deposited a peck of leached ashes. In the spring he caused the holes to be filled up. The ground near to the hills that had been left unbroken by the plough was well loosened with the mattock, and after harrowing the winter fallow the orchard was cross ploughed and harrowed, and planted in well manured drills with potatoes and sugar beets. The change in the trees was remarkable. That summer they bore heavily. The following spring the same orchard was heavily top-dressed with wood ashes, ploughed and left to lie fallow. Nothing more was done for several years except to plough the land annually and take off an occasional crop of beets or turnips or potatoes. But there were no longer any signs of decadence. The peach trees seemed to have taken a new lease of life, and although in the course of the next ten years some thirty or forty of them that had suffered most died out, the remainder of the four hundred trees of which the orchard was composed continued in vigorous health and bore annually heavy crops. At the end of that time a change of proprietors took place—the orchard fell into neglect, and five years later there was scarcely a hundred trees alive.

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 CLOVER is to farming what faith is to religion.—One may go through the whole list of manures and good works, but must come to clover and faith at last.

## CEMENT AND CONCRETE PIPES.

CHURCHVILLE, HARFORD COUNTY, MD., }  
 June 10th, 1867. }

To the editors of the *Maryland Farmer* :

Can you give a subscriber, in your next number of the *Maryland Farmer*, any information about cement conduits for conveying water from a spring. I have been told that it has been tried, but have not learned how it answers. How is it made? Will it stand the pressure when crossing a valley? Will it last, and what is the cost? I suppose the channel at the bottom ought not to be of greater volume than five or six inches, that the cement is poured around the rod and the latter drawn forward before the cement is dry.

## ANSWER.

The largest pipes in cement or concrete that we have seen have not exceeded from two to three inches in diameter. Those that came under our special observation in the manufacture were of concrete—lime and coarse sand. The implements used consisted simply of an oblong box or trough, open on top and at both ends to receive and mould the concrete, and a rod of the diameter of the pipe, with a leather loop at one end to draw it out nearly to its full length as the construction of the pipe went on. Care had to be taken in drawing out the rod at each new application of the concrete to ease it by turning it once or twice so that it could be slid along without difficulty, and with a view to prevent cracking the concrete. The pipe therefore presented to the eye, as finished, a square form on the outside, which is unquestionably the form that offers the greatest resistance to breaking, as the experiments of Brunel and the engineers proved conclusively in building the iron bridge across the Menai Straits. We take it for granted that in using cement a somewhat similar process would be adopted.

The most important question—that of durability—we cannot answer. But as these kinds of pipe have not come into general use, we should very much hesitate to adopt them where any great length was required. That these pipes will stand very well the pressure of running water from a spring we know, in cases where there was a regular and continuous fall from the spring to the outlet, but we should hesitate to use them where the water was stopped off at the lower end and the entire pressure of the fall from the spring was upon the pipes. We should also doubt their ability to stand pressure in crossing a curved line, like an inverted syphon—if that is what our correspondent proposes. In such a case there would be this further difficulty, that unless the spring was entirely protected from washing rains the concave portion of the pipe would be clogged up gradually with the mud held in solu-

tion. We have found this the case with pipes of an inch bore of not more than sixty feet in length under similar circumstances, and only succeeded in obviating the difficulty by filling up the depression and raising the pipes so that it should rest on a solid and equable foundation throughout. Such has been our experience, but if any of our readers have succeeded better we should be glad to hear from them and to furnish our correspondent with their reply. A neighbor of ours has used very liberally the two-inch pipes manufactured at the potteries, and to be had of Gibson and others of this city. With these pipes he took up several small springs, cemented carefully the joints of the pipes, and after carrying the waters so collected into a main pipe of larger diameter, brought the whole in a single volume of water into his dairy. His success was complete.—These pipes have been laid down now over eight years, and are as perfect to-day as when they were first used. We have thus given our correspondent all the information at present at our command, and we regret that we cannot answer his enquiry in a fuller or more satisfactory manner.—[EDS. FARMER.

#### TAN BARK.

[PAULDING, JASPER Co., Miss., June 9th, 1867.

*To the Editors of the Maryland Farmer :*

I would be pleased if you or some of your correspondents would be so kind as to inform me through your most valuable *Farmer*, whether tan bark in its raw or natural state, will improve stiff land, (what is known in this state as, hog wallow Prairie,) and if so the best method of applying it. By so doing you will much oblige  
A SUBSCRIBER.

#### ANSWER.

We have never known tan bark to be used in any case with sufficient effect to warrant its application to land. Nor do we think much of its ameliorating influences. Its antiseptic qualities are in the first place against it. In the second place we have found it the most untractable of all the vegetable fibres with which we have had to deal. We know there are some persons who have recommended its use, but their experience does not tally with that of quite a number of others, who have tried it. The only mode in which tan bark can be used with any sensible degree of effect is to compost it with lime, but it takes a long time to reduce the fibre and we should prefer to apply the lime in a caustic state to the land itself. Even the worst "Hog-wallow" Prairie, and we have seen a good deal of Hog-wallow land in Kentucky, may be ameliorated by a liberal application of lime, notwithstanding the surface soil may rest, as it often does in Kentucky, upon a limestone basis. We should prefer pine shatters and woods' mould composted with lime in the case of our

correspondent, to any application of tan bark.—There is one other mode of using tan bark that we have seen recommended and which it may be proper here to state. It is to compost the tan bark with the refuse lime and hair, and fleshings of the tan yard, and after fermentation to break down the mixture and cart it out. But the most of the experiments we have witnessed with tan bark, as a fertilizer, have been failures, and we cannot therefore recommend it. Applied in its raw or natural state, it would certainly not be productive of any sensible benefit to the soil.

#### Measuring Lands and Crops.

There are so many advantages to farmers in knowing the exact area of their fields and crops, that none should omit the means for readily obtaining this knowledge. They will know how much seed to use, how thickly to apply it, how many bushels or tons to expect in product, and by measuring this product be enabled to judge the value of different kinds of management. A surveyor's chain is the most accurate; but a tape line is lighter and handier. A small sized tarred cord, with red yarn run through it, and tied around it, to mark sub-divisions, answers well for common purposes, and may be of any desired length. Distances, measured and marked on a straight board fence, will readily correct such a cord. Rods or poles may be used for shorter distance; a pole or stick a rod long is rather cumbersome or inconvenient; half a rod, or eight feet and a quarter long, is too short for many purposes. We have found a 11-foot rod just the thing on many occasions; it is precisely two-thirds of a rod in length, and from this any measure may be readily computed—three lengths, being two rods, six lengths, four rods, &c. Pacing, when accurately done, is convenient on a multitude of occasions, where quick and not very strict measuring is desired, and by frequently comparing it with more accurate measurements, much precision is soon acquired in pacing distances.—*Ed. Cultivator and Country Gentleman.*

COAL ASHES.—A farmer thus speaks of the uses of Coal Ashes:—"Although anthracite coal ashes contains no organic and little mineral value for vegetable structure, it may be employed to great advantage as an absorbent in a cow's stall. If finely sifted over the floor in a dry state, it is nearly as absorbent as burned clay; but if suffered to absorb water half its mechanical value is lost. Those villagers who have to buy straw by the bundle to bed their cows will find fine dry coal ashes a tolerable substitute, and when saturated with urine it is the best of manure for the garden, or as a top-dressing of a grass plot. Coal ashes is also an excellent division of a clay soil, second only to vegetable matter."



## Our Agricultural Calendar.

### Farm Work for August.

The month of August marks the turning point between the closing up of the general harvest work and the preparations for fall seeding. It is, as it were, a period of transition. The hay, wheat, oats, rye and barley crops are secured. Early potatoes have been dug and the cultivation of the corn crop has ceased. There are, of course, many minor matters to be attended to, for field work is never over until the frost locks up the ground, when woodland work and the care of the stock constitute the principal duties of the farmer. During August, however, the ground should be prepared for Rye; and Turnips for a fall crop should be seeded. Ditching may also be done, and especial care be taken to secure sheep from the fly by keeping their noses smirched with tar. August is also the best month for destroying thistles whilst in bloom, and for eradicating briars. Materials for compost may now be collected with advantage. The work for the month is as follows:

#### FALL TURNIPS.

*Preparation of the Ground.*—Choose a light sandy or loamy soil, and plough it eight inches deep—barrow well, and sow either in drills or broadcast, from the 1st to the 10th of the month.

*As to Manure.*—When the soil needs enriching, spread 10 two-horse cart loads of barn yard manure to the acre broadcast, over the land intended for turnips, before ploughing. Turn this well under. After this work is done top-dress the piece of land with about half the same quantity of manure—well rotted, if possible—and harrow well in. Now, sow the seed broadcast. If however, the turnips are to be drilled in, open drills three feet apart, scatter the reserved manure along the drills and cover up with two bouts of the plough, as for potatoes. Now, run the roller lengthwise of the drills to flatten their crests, and drill in the seed along the middle of the flattened ridge. When bone dust is to be had there is no better fertilizer for turnips, and where manure is scarce use phosphatic guano, at the rate of two hundred and fifty pounds to the acre.

Sow one pound of turnip seed to the acre.

#### SEEDING RYE.

The soil best adapted to Rye is either an alluvial upon which the heaviest known crops have been grown, or a light sandy loam. If the soil is poor spread broadcast over it either 15 two-horse loads of good barn yard manure, or a compost made as follows:

10 loads of woods' mould, or marsh muck—5 loads of barn yard manure—10 bushels wood ashes—1 bushel refuse salt.

Let the above mixture stand in the compost heap until fermentation has well set in. As soon as it has progressed sufficiently, break down the heap, mix it well, and cart it out on the land. Spread it broadcast, plough it well under, and after once harrowing, seed the land, harrow it again, bush in the timothy seed, if the land is to be laid down in that grass, and finish all off with the roller.

*Time of Seeding.*—The best time for seeding Rye is from the 10th to the 25th of the month.

*Quantity of Seed to the Acre.*—Not less than four pecks to the acre should be seeded, and on a well prepared soil from five to six pecks may be used advantageously.

#### Selecting a Timothy Meadow.

Wherever it is proposed to seed down a meadow to timothy without any covering crop, August is the best month for this purpose. But no land should be devoted to timothy unless it is quite clean, well drained, and rich enough to carry heavy crops.

*Preparation of the Ground.*—The ground should be ploughed eight inches deep, and should be harrowed and cross harrowed, and rolled, until it is completely pulverized. If the soil requires manure, either of the following mixtures will be found sufficient for an acre:

1st.—10 bushels of unleached or 20 bushels of leached wood ashes—10 bushels of bone dust—1 bushel of refuse salt.

2d.—5 two-horse loads of barn yard manure—15 loads of woods mould, or marsh muck—20 bushels of leached ashes—2 bushels of refuse salt—1 bushel of plaster. Make these into compost, layer and layer about, and let the material remain in bulk, until fermentation takes place, then mix and cart out.

3d.—15 loads of woods mould—200 lbs. of phosphatic guano—10 bushels of leached ashes—2 bushels of refuse salt—1 bushel of plaster. Composted as above.

*Quantity of Seed to the Acre.*—Many farmers sow a peck of timothy to the acre, but it will generally be found advisable, in order to obtain a good set, and to improve the quality of the herbage to sow a peck and a half.

#### Fall Potatoes.

Keep these well hoed and clean of weeds and grass.

#### Late Corn.

If the growth of the latest planted corn has been retarded, from any cause, keep the cultivators and hoes busily at work until the soil is free from weeds and is as light as an ash heap.

#### Sheep.

Keep a trough in the sheep pasture, under cover. Spread tar on the bottom of the trough twice or three times a week, and over the tar sprinkle a layer of salt. In getting at the salt the sheep smirch their noses with the tar. By careful attention to this

suggestion the sheep will be protected by the tar from the fly, that deposits its eggs in their nostrils, and will consequently be saved from that distressing annoyance, "worms in the head," which are generated from the ova of the fly.

#### Compost for Pastures.

If it should be found desirable to improve the quality and increase the quantity of grass, on an old pasture, the following mixture, after being properly composted, may be used with advantage to each acre:

2 bushels of bone dust, moistened before mixing—5 bushels of unleached wood ashes—2 bushels of refuse salt—50 bushels of woods mould, or marsh muck—1 bushel of plaster.

Mix after fermentation and spread broadcast. If after this a sharp toothed harrow is passed over the land athwart and across, until the meadow is well scarified, and is followed by the roller, the result will be found singularly beneficial in renovating and thickening the grass.

#### Orchards.

If the orchards have not been already attended to and if the bark of the trees be rough and mossy, have their trunks and larger limbs scraped and brushed over with a mixture composed of six parts of soft soap, or whale oil, one part salt, and one part flour of sulphur.

#### Granaries.

See that the granaries have been well cleansed.—If the work is still to be done, wash them with hot ley, and then white wash them before the grain is stored.

#### Poultry Houses.

Clean these out repeatedly, at this season—white-wash them well and have the nests frequently renewed with fresh sweet straw or hay.

#### Fences.

Examine and repair these. At this season of the year the pastures usually afford less nutriment to cattle, and in search of better or more abundant food they may not improbably test the strength of the fences in their lowest or their weakest places.

#### Wet Lands.

All lands that are wet may be advantageously drained during this month.

#### Briars, Bushes, &c.

Let every thing in the shape of briars and bushes, or thistles or rank weeds, that infest the fields, be cut up during the month, and collected into piles and burned.

**WHEN TO APPLY PAINT.**—Paint, to last long, should be put on early in winter or spring, when it is cold and no dust flying. Paint put on in cold weather forms a body or coat upon the surface of the wood that becomes hard and resists weather or an edge tool even, like slate.

## Garden Work for August.

We have no preliminary remarks to make or suggestions to offer this month in regard to gardening operations other than those which we are about to append. The main work of the garden for the season is now well over, and nothing but care in cleaning off old beds, removing weeds and grass, and in seeing that the walks and borders are well kept and well trimmed is now required. The following is the general work for the month:

**Turnips.**—As early as possible, and not later than the 10th of the month, prepare a bed for turnips.—Make the ground rich, spade deeply, rake well, and sow the seed of purple-top turnips, either broadcast or in drills.

**Celery.**—Prepare a bed for celery, if that has not already been done, and set out the plants at once. This operation would have been better performed two weeks ago.

**Radishes.**—Sow radish seed at intervals of a week apart for fresh supplies to follow in succession.

**Small Salading.**—Sow the seed of small salading at intervals of ten days for successive crops.

**Peas.**—Choose a shady portion of the garden, and prepare a bed for a few rows of peas. They should be watered freely and frequently if the weather continues dry.

**Beans.**—Drill in a few rows of bunch beans, and water liberally in dry weather.

**Lettuce.**—Sow lettuce seed for a late crop. Set out young lettuce plants for heading.

**Spinach.**—Drill in a few rows of spinach for fall use. The soil should be made very rich for this healthy vegetable. Towards the close of the month prepare a bed carefully and sow spinach seed in drills for spring use.

**Pot and Medicinal Herbs.**—Cut and dry these in the shade, and after they are dried store them away in stout paper bags, properly labelled.

**Lima and Carolina Beans.**—Carefully hoe and water these, and keep the soil light and clean about the stems.

**Cabbage.**—Hoe and weed the growing plants. In dry weather water freely of an evening after sunset. If the soil is poor, use the black liquor of the barnyard diluted with a small quantity of water.

**Budding.**—Cherries and plums may be budded this month. The process may begin as soon as the bark slips freely from the stock.

**Potatoes.**—Give the later planted potatoes a thorough hoeing, and dust them with a mixture composed of two parts wood ashes, one part salt and one part plaster.

**Weeds, &c.**—See that no weeds are suffered to remain among the growing crops. Cut out all grass. Gather up all decaying vines, and keep every thing about the garden in a neat and thrifty condition.



## LIME AS A RENOVATOR OF WORN OUT LANDS.

Some years ago Samuel Sands, Esq., then editor of the *American Farmer*, offered several handsome premiums for the best essays on the *Renovation of worn out lands*. The premiums were of silver plate, valued at \$50, \$30, and \$20 which were awarded respectively to Edward Stabler, Col. Horace Capron, and T. B. Stabler, all practical farmers of Maryland. These essays, at that time, elicited much attention throughout the country. We allude to this subject now, in order to introduce to our present readers an extract from the essay which obtained the first of these premiums, on the value and mode of application of *Lime*, written by one of the most intelligent men of our State, *Edward Stabler*, of Montgomery county.

## LIME.

This, next to the proper draining (when necessary, for even lime will not enable us to dispense with it) and deep tillage, I consider the most certain and permanent agent in "renovating worn out lands," of any other substance with which I am acquainted; whether mineral, animal, or vegetable; and when it can be obtained at a reasonable cost, even with some miles hauling in addition, it is generally to be preferred, if only one kind of "bought manure" is to be used. It may, however, be used freely in conjunction with all other manures, and with decided advantage, if done with judgment.

After many years' experience in the use of lime, I would advise in all cases where it can be accomplished, to spread it on the surface from one to three or four years before the land is broken up. The effect of a single winter's frosts and rains, will more effectually dissolve and bring it into action, and benefit the succeeding crop, as also the land itself, than is attained in a longer period, by ploughing it in as soon as applied. In this way also, a much larger quantity may be safely applied to the same land at a single dressing. As there is no loss to lime from atmospheric influence, it should be kept near the surface; and the *proper* quantity to use to the best advantage, can only be determined by the price, and the state the land may be in at the time. With a good sod of grass roots to receive it, 100 or even 150 bushels to the acre, *will do no harm*; but on stiff clays, with little soil or mould on the surface, 50 bushels would be a very liberal application as a first dressing, if put on immediately after ploughing. It would be better to apply a less quantity at first, and renew it as soon as an increased growth of vegetation could be obtained.

When lime is applied in very large quantities, and immediately incorporated with a poor soil, having little or no vegetable matter in it, the *effect* is to combine with the silicious particles, abounding more or less in all clay soils—and form hard, compact masses, that are not separated by years of after tillage. This mode, therefore, to say the least, is like "burying the talent;" for so much capital lies dormant, and neither benefits the farmer or his land.—Twenty-five or thirty bushels as a first application, particularly if aided by even a light dressing of vegetable manure, will make a much quicker return for the outlay.

As to the *modus operandi* of lime, much has been written; and various, if not conflicting theories put

forth; nor do all agree as to the most judicious mode of application.

I consider it altogether unnecessary here, to attempt any explanation of the chemical changes produced in the soil by its use, or to give my own opinion on the subject, though formed after careful observation and from years' experience. To the inexperienced, however, it is of much more importance to be informed *how* to use it to the best advantage. And, as previously remarked, it is of still less consequence *how* or *when* applied, so THAT IT IS DONE.

Lime will act very beneficially, as I know from experience, on stiff tenacious clays, and so near a state of sterility, as scarcely to reproduce the seed sown on them. But if used under such circumstances, and without the aid of any kind of manure, considerable time must elapse before much amelioration of the soil need be expected.

Theory without practice does not often carry much weight with it; and on the mind of the farmer, generally speaking, it acts with less force perhaps than with most other classes in the community; for unless an array of facts, or good evidence, is adduced to inspire confidence, he is slow to change; the more so, when he knows that even a partial failure in a single crop, from experimenting, will be sensibly felt in his slender income, and perhaps for a year to come. This feeling, to a certain extent at least, is all right and proper; for experiments, to test any new theory, are best undertaken on a limited scale; time may be lost thereby, but *money may be saved in the end*.

I will now briefly give some account of the *practical* operation of my theory. My first application of lime to any extent, was 200 bushels, mostly air slaked, hauled six miles, and applied to four acres; just broken up for a corn crop, and harrowed in.—This portion of the field particularly, was so thoroughly exhausted by previous bad management, that the yield in corn was only some five or six bushels to the acre; nor was the crop sensibly increased by the lime. As the main object in cultivation was to set the field in grass, the corn was followed by a crop of small grain, and a liberal supply of clover and timothy seed, and plaster; the latter producing no visible effect whatever, and nearly all the grass seed perished, leaving the surface as bare as before. But before the field again came in course for cultivation, the good effect of the lime was so evident by the growth of white clover—a *new* variety in that vicinity—that I was encouraged to lime the whole field, containing about twelve acres, and also including this four acres; put on as before, just after breaking up for corn. The crop on this portion was increased fully five or six fold, over that adjoining, and but recently limed; thus liberally paying all expenses, and has continued ever since to produce profitable crops. Plaster now acts on it with marked effect. The first application was made some eighteen or nineteen years since; and to test the *durability* of lime, these four acres have been kept for experiment, and without the addition of other manure; except a portion, intended for still further experiment. About two acres were sown in broadcast corn, with 200 pounds Peruvian Guano—then followed wheat on the four acres, and with 200 lbs. guano to the acre, leaving two lands without guano.

The corn was materially benefitted by the guano; but the wheat was *not* benefitted by the *previous* application of it, though it was nearly or quite doubled, over the two lands left without any guano;

the wheat was harvested two years since; and no one could now point out by the growth of the clover, uniformly good on the whole, and equally limed, which portion had and which had no guano; the conclusion is, that the "renovating" effects of lime, are thus far, *ten* times as durable as guano; how much longer remains to be seen.

Some nine or ten years since, I determined to reclaim an adjoining field, at whatever cost. I was told long previous, by one of my neighbors who sold his farm, and removed to the West, in order to settle on better land, that the attempt would be futile; or, if it ever was made productive, it would cost a great deal more than the land was worth. The prospect was forbidding; for the larger portion was as much reduced as could be, by shallow tillage, no manure, no grass seed sown, and constant washing, even to gullies, and producing little else than running briars. It was broken up in the fall and winter to a much greater depth than it was ever ploughed before; sixty bushels of quick-lime to the acre, were applied in the spring, the ground well harrowed and planted in corn; such portions as required it, having been well under-drained—some two to three acres—and which were about the amount that produced any thing of a crop, or that more than paid the expense of ploughing. A crop of oats and grass seed followed; as it was not considered worth the trouble and expense to put in a crop of wheat, on  $\frac{2}{3}$  of the field. After six or seven years, the same field again coming in course, exactly the same plan was pursued, as to ploughing and lime; but rather increasing the depth than otherwise.

The crop of corn, though injured by the budworm, was good—enabling me to do what I had rarely or never done before, *sell* from  $\frac{1}{4}$  to  $\frac{1}{2}$  of the crop. Oats followed, on about  $\frac{2}{3}$  of the field, with some five or six bushels of bones to the acre, and wheat on the balance, with guano; both heavy crops, and lodging over the greater part of the field. Then followed a wheat crop on the whole; manured as much as possible from the barn-yard, and on the balance, a light dressing of guano of some 80 to 100 pounds to the acre.

The average yield of the field was over thirty-three bushels to the acre.

These results are attained with certainty; for every field and lot are accurately surveyed, and the contents noted on the plat of the farm; and the product of this field was kept separate, threshed, and measured by itself. The greater portion suffered from the drought early last year; and the harvesting was badly done, owing to the fallen and tangled state of the grain from a storm, about the time of ripening; but I have no doubt several contiguous acres might have been selected on the lowest ground (the portion under-drained) on which the yield was over forty bushels to the acre.\* This season, the same field yielded the heaviest crop of grass I ever harvested; and even on what was originally the poorest part, there is now a luxuriant crop of second growth clover, and intended for seed, that is lodging over the whole extent. We will estimate the profit and loss by figures:

To 60 bushels of lime, cost at the kiln, 16 c.....	\$9 60
7 years' interest, (though it paid in pasture in less time,).....	4 03
60 bushels of lime, cost at the kiln, 12½ c.....	7 50
3 years' interest.....	1 35
6 bushels ground bones, at 50 c.....	3 00
100 pounds guano, (African,).....	2 00

\$27 48

## CONTRA

By 33 bushels of wheat, average price sold at \$1.31.....	\$43 23
Estimate increase of corn crop, at least 6 barrels, at \$2, (and entirely owing to the lime,).....	12 00
Estimate increase of oat crop, 20 bushels, at 40 c.....	8 00
Estimate increase of hay, 1 ton.....	10 00
Estimate value of clover seed, (for there would have been none without the lime,) 1½ bushels at \$4,.....	6 00
	79 23

\$51 75

Making, in round numbers, \$50 per acre in favor of "renovating;" nor is the estimate a forced one. The actual increase of the crops is greater than the amounts assumed; and if a fair average was made of the wheat, in the joint crop of oats and wheat, the aggregate result would be increased some \$5 to \$6 per acre.

There should, perhaps, in the view of some, be a charge for draining, and for hauling and spreading the lime; also for the manure, for the crop of wheat; and for the expense of harvesting the increased crops.

The two former are amply paid for in the increased pasture; and the manure was no more than the actual yield of the land itself, after the use of lime, &c., which are charged in the account, and at more than the cost; and it is believed the increased product in straw and fodder, fully repays the expense of harvesting; to say nothing of the present state of the land, as compared to what it was originally.—It is now *radically* and *permanently* improved.

When lime has been freely used, plaster will generally, if not always, act promptly and efficiently; and thus, at very small expense, materially aid in perpetuating the improvement. Previous to its application in this case, plaster was liberally used, but with no visible effect whatever; now, its action is as marked on the *same* land, as I have ever seen anywhere.

Wherever lime can be obtained at a reasonable price—say from twelve to twenty cents per bushel in a caustic state, (or at half price, if air slaked,) with even five to ten miles hauling, it may be used to advantage on most, if not all stiff clay soils.

In some sections, these prices are paid, and it is hauled fifteen to twenty miles; and by a class of men unsurpassed for industry and thrift. The writer has known no instance where its use was persevered in, under whatever disadvantage it might be, in which success, to a greater or less extent, did not crown the effort; and many who borrowed money to procure it, in the first instance, have, mainly by its use, become independent; and *money lenders* themselves.

\* It was gleaned with the horse-rake, and by the hogs; yet sufficient seed was left on the land, to produce this year, a *volunteer* crop of wheat with the grass, estimated by many who saw it, as well worth harvesting.

CLEANSING WOOL OF GUMMY MATTER.—The *Maine Farmer* gives the following:

"Take one pound of saleratus for twelve pounds of wool, dissolve in water not quite boiling hot, then put in the wool and stir occasionally for one hour; take it out and squeeze it thoroughly, or what is better, run through a clothes-wringer, rinse in cold water, and spread on grass ground to dry. This process will remove all gum and dirt from any kind of wool, and make it much better for custom work."



**BONES DISSOLVED WITH SULPHURIC ACID.**

Bone dust, used in any way, is valuable to the farmer, and the only difficulty is, that the supply at the season of the year when required, is seldom equal to the demand. Greater attention should be paid to the gathering of them in the country towns and villages, and we are sure those who once use them, will not fail to prefer them, for a permanent improvement of their soil, to anything else. An experienced farmer of this State gave, some few years since, the following as his method of preparing bones with oil of vitriol, which we commend to the attention of those wishing to follow his laudable efforts to improve the soil:

"The bones (which we buy in the neighborhood) after breaking them with a small sledge hammer on an old anvil, we put at the rate of three bushels in one half of a hogshhead, and apply to that quantity 75 pounds oil of vitriol, filling up the half hogshhead to within eight inches of the top with water, letting them remain (but stir the contents occasionally with a stick) say two to five weeks, according to the quality and strength of the vitriol; then start the contents of the half hogshhead into a large iron kettle, apply a slight fire, and the whole contents will in less than an hour, be reduced to a perfect jelly. We use two half hogshheads at once, to prepare it expeditiously.

"We then mix the contents of each kettle with a horse cart load of rich earth or ashes, throwing in a half barrel of plaster; mix or compost it handsomely, and use at pleasure, on an acre of land, with any crop you choose, and you will have permanently improved two acres, at the following cost:

Bones.....	\$1 50
Vitriol.....	3 75
Plaster.....	1 12
	<hr/> \$5 37

or \$3.18 per acre, and this may be repeated so as with proper attention as much lasting improvement may be made each year as many farmers derive from their barn yards. Bones in any form never fail to show their striking effects on clover and other grasses—but either bones or guano will scarcely ever fail to produce a better crop of clover, which with the increased quantity of straw (particularly when guano is used) will enable and encourage the saving of larger quantities of barn-yard manure, and which must inevitably cause a lasting improvement."

**Preparation of Bones by Putrefaction.**

Mr. Tyson, whilst occupying the position of Maryland State chemist, published the following in one of his annual reports:

"There are three modes of applying crushed bones to the soil—1st, In the dry state, as pur-

chased—2d, Dissolved in sulphuric acid—3d, Causing an incipient decay, or, more correctly, putrefaction of their animal matter." After presenting his views upon the two first mentioned modes, he adds:

"It remains now to notice the third mode of preparing bones, which consists in causing putrefaction and decay.

This mode has been evidently coming more into use within a few years past, and we often find directions in the agricultural journals for effecting it, most generally by making them into composts with stable manure or other matter. I have, however, met with nothing in that way that appears likely to answer a better purpose than that practiced by me 19 years ago, after experimenting to some extent. And as inquiries have been made, in answer to which I had found it necessary frequently to describe the process, it will now be repeated in full.

Having smoothed over the surface of the ground, (under a shed, if convenient,) place thereon evenly a layer of three inches of ground bones, and then an even layer of good fine soil or earth, free from stones or sticks. Give a good sprinkling of gypsum over each layer of earth. Another layer of bones is applied upon the layer of earth, and the same alternations are to be repeated with the gypsum until we have four of each, bones and earth, and the height of the pile will be 24 inches. As the bones are usually dry, each layer should be well moistened with water, or *better with urine*, in order to hasten the process. It is proper to place two or more sticks in the pile reaching to its base, which should be frequently examined by feeling them, in order to judge of the degree of heat produced. If the weather be warm they will begin to heat in a few days, and in a week or two will become hot. When upon taking out the sticks they feel unpleasantly hot, the process should be checked by chopping or spading down the mass from top to bottom, which, if carefully done, mixes the materials well together, and they are ready for spreading.

If the process be commenced during cold weather it may be hastened by placing at the bottom a layer of fresh horse dung about 6 inches thick, and covering the pile with straw or fodder to retain the heat. There is much testimony in favor of using salt as a manure, and it cannot be applied more advantageously than with the bones, because it promotes their solubility. It would be better to place the proper dose of salt with the gypsum upon each layer of the earth.

In reference to the quantity of bones to the acre I may say, that after trying them in quantities from 30 bushels down to 10, I came to the conclusion that 10 bushels to the acre was the most advantageous quantity. I became satisfied also that this quantity, prepared as I have just indicated, and uniform-



ly sown, will be as effective for a year or two as double the quantity applied in the dry state.

Should the soil be dry when wheat ground is dressed with dry bones, and continue so for some time after, but little effect will be produced by them upon the autumn growth.

The effect of the putrified bones will be obvious within a few days after the young wheat appears above the surface. The putrefaction in the first case goes on very slowly; but when the bones have been once heated it will proceed more readily and of course furnish an earlier supply of the much needed ammonia, as well as phosphoric acid."

**RYE.**—Rye is a sure and excellent manurial crop for sandy grounds, and is preferable to clover on poor soils, as it will grow on soils too poor to produce clover. But it is too shallow-rooted, and otherwise defective, to bear a comparison with clover as a manurial crop on lands that will grow clover.—The rye intended for manure is usually sown in August, or about the 1st of September; its grown crop not only furnishes a fine autumnal pasturage for all farm animals, but protects the soil of our rolling lands from being washed away by heavy rains and melting snows, and forms, in its remains, a pretty good manure the next season for a late sown crop. So rye may be, and sometimes is, sown for this purpose among the growing corn, at the last working of the corn, to good advantage. Rye is grown very advantageously as a green manurial crop in Germany and in Northern Italy. Von Voght, of Germany, considers it the best of all green manures for sandy soils. It is a better soil renovator than oats, as the roots of the rye are thicker and extend deeper into the soil than those of oats do. But rye is the most expensive green manure crop of the two, on account of the high price of its grain or seeds.—*John M. Wolfinger.*

**DESTRUCTION OF WEEVIL AND OTHER INSECTS.**—In Belgium sulphur gas has been found the most effectual remedy for destroying the weevil and alucite infesting cereals. Since 1865 the depredations of these insects in that country have been alarming, and the scourge threatens to become even greater in the future.

The mode of destroying these parasites as noticed by M. GAUD, Agricultural Engineer, of Belgium, is to deposit the grain in barrels smoked with burning sulphur. Coarse threads are drawn through melted brimstone and these are burned in the barrel. The grain is then thrown among the fumes and kept there under cover for fifteen minutes, when the operation is complete.

Has any person ever tried Rarey's system of horse-taming on the night-mares?

### A Few Hints on Wheat Culture.

Farmers are beginning to think about preparing their ground for wheat. A few words on the subject may not be inappropriate. When the ground is properly prepared, and the seed properly sown—the wheat crop, on farms distant from market, is one of the most profitable. There is but little wheat put in as it ought to be. In too many cases, the ground is plowed but once, and then but three or four inches in depth. Can a heavy crop be expected from such a preparation? The soil should be plowed to the depth of, at least, 12 inches, and it should be plowed two or three times before the seed is sown. Some practice sub-soiling, and say that it pays them abundantly. By this depth of plowing, not only is there more plant food furnished—not only can the roots run down deeper into the soil, and thus be able to better withstand the upheaving of the earth by the winter frosts—not only can they better endure the severe drouths of the succeeding spring (such as we have just passed through): but what is more important than all, the great depth of soil furnishes an excellent drainage for the winter rains, allowing the water to work down into the soil, and to gradually work off, thus preventing winter-killing by the plants being heaved out by the constant thawing and freezing, and the upheaval of the soil, where it is moist, exposing the roots of the plants to the drying winds and cutting frosts. Not a winter passes but in some section or other, or in all sections, we hear that the wheat is "winter-killed." And so it is, when put in so shallow; but, when put in properly, no such complaint will be heard.

In selecting ground for wheat, choose that which is rolling and naturally well drained. In the Northern climate, where snow falls and lays upon the ground all winter, this is not so important. But here, where we have rain instead of snow, where it thaws one day and freezes the next, or does both on the same day—it is a matter of the first importance. It is also well to plow the ground in what are termed back furrows, leaving open or water furrows to carry off the surplus water.

We urge the value of the drill in putting in the seed. It can certainly be done more evenly, and the plants will be less liable to be heaved out. The yield will also prove greater.

Seed is a matter of the first importance. None but the plumpest and best should ever be used. It should be fanned and re-fanned, and all the foul seed and light kernels blown from it. Then it should be washed in lime water, or other pickle, removing everything from the kernel that may affect the health of the plant.

The little extra labor used in cleansing and purifying the seed, will reward one a hundred-fold. Then cheat or chess, oats, smut, &c., will be strangers to the coming crop, the succeeding spring, and the field will be a pleasant sight to behold.—*Valley Far.*

## MIXING SOILS.

All past experience has proven that there is a certain species or state of soil which, other things being equal, will produce better crops than any other state. To bring his soil into this state is, or should be the object of the farmer, and thus he is deeply interested in ascertaining the most economical mode of doing it. Analysis has demonstrated that the basis of all soils consists of silica or sand and clay, and the marked difference in soils is caused by the different proportions of these substances: alumina or clay, and silica or sand. Soils may be divided into six kinds, viz: 1st, "pure clay," or 60 of silica and 40 of alumina. Such a soil when mixed with water will precipitate no sediment. Second, clay soil (brick clay,) consisting of 25 of alumina, and 75 of silica. Such a soil, when washed, will precipitate some 15 per cent. of sand. Third, clay loam, containing 80 of sand and 20 of alumina or clay, and will by washing precipitate some 25 per cent. of sand. Fourth a loamy or common soil, consisting of silica 85 and alumina 15; this, other things being equal, constitutes the most productive soil.—Fifth, a sandy loam, which precipitates some 90 per cent. of sand; and sixth, a sandy soil, containing not more than 5 per cent. of clay.

Here we have a standard, in the fourth kind, at which we should all aim. We know that some sandy soils, even with liberal manuring, will not produce good crops, because the soil is too loose; the same may be said of a stiff clay soil, but for a different reason, for in this case the soil is so compact that the roots cannot force their way through.

Here we have the two extremes, and know that a medium is best; the course of which is plain to even a 'common farmer.'

I do not wish to be understood as advocating the hauling of clay or sand from a considerable distance, but wish my remarks to apply to clayey or sandy spots in the same field, or adjoining fields, for they are never far apart. On almost every farm there are sandy spots in the fields which do not produce as good crops as the remainder of the field. Such things are best when done on a small scale and during leisure time. A few inches of sand spread on a stiff clay soil will produce a change which will surprise any one not acquainted with the theory of mixing soils. For a clay soil which extends over the whole or a large portion of the field, the best plan is to haul sand into the barnyard in the fall, after the manure is out. If the washings or scrapings of the road can be obtained, so much the better. With the economical farmer there are many ways in which sand may be used to great benefit. If it is hauled during the fall and placed under shelter, the stables may be filled up and cleaned out several times during the winter.

Too many of our barnyards slope towards one side, and the liquid is allowed to run off and waste. Now, if at the edge of the yard a pit be dug and filled with sand, it will save all this waste of the best portion of the manure, and will form the very best manure for stiff and clayey land. Where there is no such land, it will form an excellent top-dressing for meadows or pasture lands. With good management a farmer may in this manner add thirty or forty loads to his manure heap at a very slight cost, as all the labor may be performed at "odd times." Sand mixed with pig manure will improve its quality for any purpose, and especially so for clay land.

Clay, not being as good an absorbent, is best applied directly to sandy land, without going through the barnyard or pig-pen, and may be put on in lumps and then harrowed, or be plowed up and well harrowed before hauling. Of the two I prefer the latter, especially if applied to land already in grass or pasture. If applied on the surface, the clay will soon work itself into the sand, in the same manner I hope I have worked into you, good reader; that is, by weight.—*Cor. in Germantown Telegraph.*

## Pickling Seed Wheat.

A correspondent in the *Canada Farmer*, writing on the subject of wheat growing, offers the following:—"An important operation in the process of wheat sowing is too often neglected—I allude to the pickling of seed. First, it points out to us the bad grains, which may thus be removed, reducing the percentage of lost seed; and secondly, it strikes at the root of smut and other fungi; for it is these very imperfectly formed grains that are chiefly attacked by such parasites. Now smut is found in the imperfect grains, and in such small quantities (as botanists tell us,) that it is absorbed in the root of the young plant, bursting out a short time after the earing, throws upon it fungi, in the dark rusty form with which we are but too familiar. If we simply steep our wheat in water, the light grains which, though too heavy to be blown out by the fanning mill, are imperfect, will rise to the surface and may be removed. If to this water we add lime, we shall kill all traces of smut, &c., &c., which may have clung to the otherwise sound seed by contagion with the infected grains. But let us remember, above all, that the most certain prescription for the securing of good crops, is a change of seed;—get your seed from a different variety of soil."

DRY HAY FOR COWS IN SUMMER.—Cows sometimes get a surfeit of grass, especially in wet, warm weather, when the grass is succulent and rich.—This feed distends the bowels uncomfortably. An armful of dry hay once a day will serve to absorb some of this moisture, and benefit the cow in several respects.



## DRAINING.

The importance of draining is not properly understood nor duly appreciated among us. Although water is indispensable to vegetation, too much of it is quite as hurtful as too little. It is necessary to the germination of the seed—to the decomposition of vegetable matter in the soil—to the transmission of food to the plant, to its circulation there and to the maturity of the product.

All these useful purposes are defeated when water remains in the soil to excess—the seed rots, the vegetable matter which should serve as the food of the crop remains insoluble in consequence of the absence of heat and air, which the water excludes; or if the seed grows the plant is sickly for want of its proper food, and there is consequently a virtual failure for the harvest.

It is not from the surface that we are to determine whether the land is sufficiently dry to support a healthy vegetation, but we must examine the under stratum from which the plants draw their nourishment. If this is wet, if it grows marshy plants, if water will collect in a hole sunk fifteen inches below the surface, the land is too wet for cultivated crops, and means should be taken to render it more dry.

Cold sour lands are invariably wet, if not on the surface then in the subsoil. Wet lands are generally rich lands because the presence of the water has prevented the decomposition of the vegetable matter, which when the surplus water is drawn off becomes food for the growing crops.

Let me suppose a case which will be found to exist in many portions of the country. There is a slope of a little hill half a mile in extent terminated by a flat through which a little brook runs. The soil of this slope is from eight to ten inches deep, of a porous quality, resting upon an impervious subsoil. Near the top of this slope, all along on a horizontal line or perhaps lower down, "spouts" or springs burst through the subsoil, the waters from which find easy passage through the loose, porous soil of the slope and flat, soon find their way into the brook. A thermometer plunged down to the subsoil in midsummer will indicate a temperature of not more than sixty, whereas most of our crops require a temperature of at least seventy to eighty. How shall we remedy this evil and render this land productive? Simply by running a drain across the slope just above where the land is too wet, and thus conduct the water into the brook through a harmless channel.

Some will object to this on the plea that will cost too much, but to such I can give nothing better than the Scotchman's answer to a similar objection, "that it costs more not to do it."

Nor does the benefit of the drain cease when the

surplus water has been removed, for it admits the air into and through the soil to a degree which would surprise those who have no experience in such matters. The draft of a two-inch tile drain one hundred rods long, is more than sufficient to put out a lighted candle, and of course this air must find its way through the soil or the draught would not exist. And as the air always contains more or less moisture it will of course deposit this moisture when it comes in contact with the cooler earth, and in a dry time will keep the soil moist just as we see the moisture collect upon the outside of a cool pitcher on a warm day in harvest. In fact draining makes wet soil dry and dry soil wet, as has been proved by myself.—*Cor. Ger. Telegraph.*

## Selecting Seed Corn.

An Illinois correspondent of the *Independent* writes: Last spring and early summer there was some discussion about selecting seed-corn. Some advised shelling the tips off and reserving the middle of the ear for planting. One man said one grain on the same cob is as good as another. Had he been a raiser of corn he would have known better. Some ten years ago I planted an ear of corn to test the difference between the produce of the kernels of both ends and the middle of the same ear, and will give you the result. The soil was just alike, the cultivation the same, and the crop very different. I planted the first two rows from the large end of the ear, the next two rows from the middle, and the last two rows from the tip or small end; and planted all the same morning. The large end produced fair-sized ears, with irregular rows, much as you will find them at that end of the ear. The middle kernels produced large ears, mostly straight-rowed and fair. The tips which brought forth nubbins only; there was not a fair ear on the two rows of corn. This is an experimental fact which you may use as you please. I have raised corn more or less for forty years: and now plant only about half, or at most two-thirds, of the kernels on each ear of corn; and I generally raise good crops.

**POULTRY IN ORCHARDS.**—Poultry are very effective destroyers of the canker-worms, and should always have access to orchards infested by these destructive insects, as they pick up the pests when they descend from the trees to enter the ground, and also when they emerge from the ground as moths in Spring. They scratch the soil in search of the pupæ, which lie hidden beneath the surface, and are persevering devourers of these destructive insects in every stage of their existence.

Why is a man that fails in kissing a lady like a shipwreck fisherman? Because he has lost his *smack*.



### FALL MANURING FOR CORN.

It is sometimes a question with farmers whether they ought to apply manure to land in the autumn, which they intend to plant to corn or potatoes the following spring—letting it remain on the surface through the winter. Frequently it is convenient to do so. Spring is a hurrying season. Rains delay the work; mud hinders the drawing of manure. If they can keep it without waste through the summer and fall, adding meanwhile ingredients to swell the bulk, and increase the richness, they can draw and spread it in the winter even, when there is more leisure.

But does it waste by being exposed to the elements through the winter? We think not, chemically at least. It may be washed or floated off from steep hill-sides, or flats liable to overflow. But on level or moderately rolling land, there is probably not only no waste in applying the manure in the autumn or winter, but it will benefit the crop grown the next season, much more than if put on in the spring. Some of our best farmers have adopted this practice, and they find it to work well. How can the manure waste? Will any one tell us? As fermentation takes place, consequently no gases are evolved to pass off. But it dries, says one, when there is snow on the ground, by the wind and frosts. Draw out a load of manure, and spread it, and in a day it will not weigh more than a quarter as much as when put on the wagon. True, but what dries out of it? Water—nothing else of value. Dry straw is just as enriching as wet straw. It is questionable even whether barn-yard manure will lose any of its fertilizing qualities if spread on the surface of the ground in mid summer, and exposed to the sun and winds till completely dried. The gases that are given off, and taint the air, are of little value to the crop. They will return in sufficient quantities to the plant, by absorption through its leaves.

The advantages of manuring on the surface in the fall are great. Much of the soluble part of the manure is taken up by the water, and carried into the soil, where it is ready for immediate use by the following crop. If the ensuing summer be very dry, a coat of ordinary barn-yard manure may not materially benefit corn, if put on in the spring just before plowing, from the fact that it will not decompose, and become available plant food, from want of moisture early in the season. At any rate if applied in the fall the manure would stimulate the corn quicker than if put on late in the spring. If it be wet ground to which the manure is applied, it will cause the grass to sprout earlier and ranker, thus furnishing considerable pasture for sheep in the spring, or the grass will be so much gained in

green manure if turned under. We believe in manuring in the fall. Clean the hog pens, scrape the barn-yards, draw some muck, empty the sinks, and withal prepare for making and saving manure during the winter, so that next autumn will find you with a more ample supply than ever before.—*Rural New Yorker*.

### Claying Sandy Soils.

A correspondent in the *Hammonton Culturist*, offers the following on this subject: "It is, perhaps, not generally known, that one of the very best methods of renovating or improving these light soils is to clay them. While all clays cannot be applied with safety, there are some which the farmer may use without fear. Where the clay is calcareous, the effects of an application are fully equal to marling, and if the clay contains alumina, it gives firmness and retentiveness to sandy soils. Clays which are pliable, of solid consistency, and have an unctuous or greasy feel, invariably produce excellent results. Fifty cart loads of such clay to an acre of light soil will give to it a firmness that is really wonderful, and will fit it for crops, which in its natural condition could not be grown upon it. I would as soon have a good calcareous or aluminous clay bed on a farm of light soil, as a bed of marl.

Allow me to remark, that the application should be made in Fall or Winter, the time when our farmers have most leisure. The frost acting upon the clay will pulverize and incorporate it with the soil. A word of caution—never apply clay that abounds in iron. It will do more harm than good."

### Turnips among Corn.

Mr. John Hamill, writing on this subject to the *Germantown Telegraph*, says:

It is frequently the case that in passing through corn-fields in autumn, we find the space between the rows occupied with sturdy weeds; sometimes the spurious vegetation completely overtops the maize, and "casts it into the shade." Now I would inquire, is it not much better and more prudent, in every sense of the word, for the farmer to occupy the soil monopolized by the exhausting weeds with some crop that will contribute to his resources, than to have it filled with such productions, and which will not only "sap the land" most wretchedly, but foul it by the dissemination of their minute and multitudinous seeds? Certainly no farmer can doubt the affirmative. By sowing the Purple Top turnip seed at the last dressing of the corn crop, and "scuffling" it in, or sowing just before a rain and allowing that to cover it, he can have a hundred bushels of good turnips per acre, if the soil be rich and well cultivated, instead of a host of worthless and pestilent weeds.

## Tobacco Culture.

### STRIPPING, BULKING, Etc.

Stripping will be the farmer's labor during damp weather, until his tobacco is stripped and ready for market.

The lugs, shipping and manufacturing, which are worst, medium and best qualities, should be separated at stripping. The lugs or worst quality are found at the bottom of the plant; they are chaffy and light leaves, and should be stripped from the stalk and tied in bundles by themselves with all of the ragged, black and injured leaves.

The second quality, or shipping tobacco, is a grade above the lugs; it is the red or brown tobacco. This should also be tied in separate bundles.

The best, or manufacturing, is the finest and brightest leaves, and should be put in bundles by itself.

In stripping, the stems of the leaves should be broken off as close as possible to the stalk; this adds to the weight of the tobacco.

In forming a bundle, the butts of the leaves should be placed evenly, and closely together, and pressed tightly in the hand; then a leaf should be folded to form a wrapper two inches in width; then wrap it tightly and smoothly around the butts of the leaves, winding it from the end down, about two inches and a half; then open the bundle in the middle, and tuck the wrapper-leaf through the opening, and draw it snug, so that when the opening is closed the wrapper-leaf will remain; this forms a bundle which we call a "hand of tobacco."

The hands should be strung on sticks, and hoisted up in the barn or tier-poles; eighteen or twenty hands may be put on each stick, at equal distances apart.

### BULKING AND PACKING.

Let the tobacco hang in the barn until within a week or two of hogsheading; take it down, remove it from the sticks, and put in a bulk. This is done by making a platform, and covering it with straw or hay; then lay the hands of tobacco, side by side, in layers around, with the butts outward; in the same manner as wheat and oats are stacked.

If the atmosphere is dry, the bulk should be covered up closely, so that the tobacco will retain its moisture. It should not be too damp, for there is danger of its moulding in the bulk.

If it should mould, hang it up again in the barn, and put fire under it. The mould that it gets in the bulk is generally the yellow mould, which is the most fatal. It sometimes gets a white mould on it, while hanging in the barn, when the atmosphere is very damp and warm, but this does not material-

ly injure it, for it will rub off while drawing the tobacco through the hands. It should be drawn through the hands every time it is handled, to keep it straight, and to give it a silky texture, which adds to its price.

We generally send tobacco to market in hogsheads, and sometimes in boxes. A hogshead four feet in length, and three feet in diameter, is the medium size. One thousand pounds is considered a full hogshead; but one of the above dimensions can hold one thousand five hundred pounds, by hard pressing; but this blackens the tobacco, and injures the sale of it. Packing in the hogshead is done by first laying a course or layer of bundles straight across the bottom, keeping the butts even and close together; then fill up on each side of the centre course, placing the butts against the staves; then the butts of the hands that lie against the hogshead should be covered up with two or three others, pressed closely down. The next centre course should be laid across the first, and done in the same manner as before, and so on, crossing each course in succession, until the hogshead is two-thirds full, when the press should be applied till the tobacco is pressed down to within a foot and a half of the bottom of the hogshead.

The press should remain on an hour or more, in order that the tobacco may settle together; then the press should be raised, and the packing resumed as before till the tobacco is within a foot and a half of the top; then the press should again be applied till the tobacco is pressed half way down the hogshead; the same proportion should be observed until the hogshead is full. Then put the head in, and it is ready for market.—*Tobacco Leaf.*

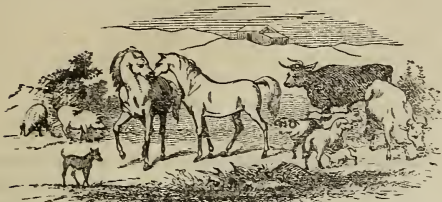
SIR WALTER RALEIGH.—If we may judge from the size of his box, Sir Walter was no niggard of his tobacco. In 1719 this relic was preserved in the museum of Mr. Ralph Thoresby, of Leeds. It was of a cylindrical form, about seven inches diameter and thirteen inches high; the outside was of gilt leather, and in the inside was a cavity for a receiver of glass or metal, which would hold about a pound of tobacco; a kind of collar, connecting the receiver with the case, was pierced with holes for pipes. This curiosity was presented to Mr. Thoresby by the Rev. Edward Morris, rector of Boroughbridge, in Yorkshire, but how it came into the possession of the latter does not appear.

Why are young ladies generally bad grammarians? Because few of them are able to *decline* matrimony.

The following is probably the worst conundrum ever perpetrated: "Why is a dog's tail like an old man? Because it is in-firm."



## Live Stock Register.



### DIFFERENT BREEDS OF SHEEP.

The great interest existing in all parts of our country in sheep induces me to offer the following brief notes of the characteristics of the various breeds in the United States:

**NATIVES.**—These are mainly of English origin, mingled to some extent with other continental blood. They are called natives simply to distinguish them from other later and improved breeds. The English were long legged, narrow breasted, coarse wooled, light quartered animals. A fair average weight for them was about 12 pounds per quarter. History tells us that as early as 1676 New England was well supplied with sheep. The yield of wool in those days was from two to three and a half pounds per sheep, which does not compare unfavorably with that of the present day, but the mutton was not up to the present standard. The original natives have become so mixed with later importations that they have become nearly extinct.

**SPANISH MERINOS.**—Celebrated as being a fine wooled breed. It is divided into several families, as the Escorial, noted for the exceeding fineness of their wool; the Gaudaloupe, noted for their symmetry of form, fine quality, and good quantity of wool; the Negrettis, Infantados, Paulars and others. The Merinos vary greatly, not only in Spain, but in all countries into which they have been introduced, the climate and soil having a great influence on them. They all, however, retain to a remarkable degree their prominent peculiarities, which are fineness of wool, comparatively small size, short legs, hardness and longevity. They were introduced into this country near the beginning of this century. In 1809 and 1810, 3,000 were distributed in several different States, imported from Spain. The French Merino is a family established from the Spanish, bred to a larger size than their progenitors. Their wool is not the best, though it is good; the skin disposed in folds; a very yolk, heavy fleece, with little external gum. This breed has become unpopular, and has been generally discarded.

**SAXON MERINOS.**—This is properly only a branch of

the Merino family, although regarded by some as a distinct breed. Their wool is remarkable for exceeding fineness; but their fleeces are thin, scarcely exceeding two pounds; they are of fragile constitution and require extreme tender care, and are not generally regarded as reliable or profitable for our Northern climate.

**SILISIAN MERINOS.**—Are an offshoot of Spanish stock originating in Silicia, from Infantado ewes and Negretti rams, imported some 50 years since.—Randall, in his "Fine Wool Husbandry," deems them well fitted for improving coarse families of Merinos in evenness and fineness of fleece. They are of good size, fleece yolk and dark, but destitute of gum. Having been bred with skill and care they are claimed as hardy.

**AMERICAN MERINOS.**—This is an improvement on the Spanish, and may be classed as the Jarvis, the American Infantado—Atwood and Paular. The Jarvis are the result of a mixture of the Leonese varieties, judiciously bred to an established standard. Their characteristics are a loose, thick skin, with few corrugations; little external gum, and comparatively light colored; fine, even fleece, with a brilliancy and style almost equal to the Saxon.—The American Infantados were bred from Humphrey's importation by Stephen Atwood. They are of large size, short necked, short hipped, broad shouldered, round and symmetrical; skin loose and mellow, and of a deep rose color; wool short, very yolk, and of a quality, style and evenness scarcely surpassed. Various breeders have produced a fleece from about six to ten pounds; some of the heaviest ram fleeces weighing about 30 pounds. The Paulars are a heavy, thick fleeced, very hardy variety, improved of late years; with less fineness and evenness of fleece than either of the two preceding, less yolk and external gum, but much more than the Jarvis.

**LEICESTERS.**—This is a long wooled breed, and described thus: head should be hornless, long, small and tapering towards the muzzle, and projecting horizontally forward; eyes prominent, with a quiet expression, ears thin, rather long, and directed backwards; neck full and broad at its base, nearly straight from the rump to the poll; breast broad and round, with no angular formation where the shoulders join the neck or back; the arm fleshy and even down to the knee, bones of the leg small and standing wide apart; no looseness of skin about them, and comparatively bare of wool; chest and barrel deep and round, the ribs forming a considerable arch from the spine; barrel well ribbed home, with no irregularity of line on the back or belly; carcase gradually diminishing in width towards the rump; quarters long and full with the muscles, like



those on the fore legs, extending down to the hock; thighs wide and full; legs of moderate length; pelt moderately thin, but soft and elastic, and covered with a good quality of white wool. This breed is large and heavy, of good constitution, hardiness and fecundity, but are poor nurses. They require rich pastures and feed. Mutton rather too fat for the table.

**COTSWOLDS.**—This breed is superior to the Leicesters in weight of wool, hardiness and vitality.—They are much more prolific and are excellent nurses. They have good form and size, the rams often attaining a weight of 300 pounds. Wool of moderate fineness, long, white and strong, the fleeces averaging eight or nine pounds. They have a long, thin head well set on, and a broad chest, with a well rounded barrel and straight back. They vie with the Leicesters in the rapidity of growth, and are docile, and unsurpassed in size and weight. Mutton fat, but better intermixed than the Leicester. They are used for crossing with other breeds to obtain early lambs for market; they require rich pastures; where these are abundant, they are invaluable.

**SOUTH DOWNS.**—Have a harmless head and a long, gray, or brown face, thin lips and under jaw, wooly ears and forehead, full bright eye, thin neck, widening to the shoulders, and a deep wide breast, projecting forward; back flat, projecting from shoulder to tail, loin and rump broad, with wide hips; belly straight, like back; legs of medium length; bones fine; wool short, curled and fine, destitute of fibrous spires that give the felting properties. They are exceedingly prolific and hardy, and their mutton is esteemed the best.

**HAMPSHIRE DOWNS.**—These are a cross of the Hampshire and Wiltshire sheep with South Down rams of the darkest face; changing the white face to dark, breeding off the horns, and remedying other defects. They produce wool slightly coarser, heavier and longer. They are especially valuable for crossing and for raising early lambs; are hardy, and make an early growth.

**SHROPSHIRE DOWNS.**—This breed resulted from several crosses of the South Downs with hardy, short wooled stock. They are healthy and favorably regarded for their fecundity, early maturity, weight of carcass and wool, and facility of fattening upon a comparatively small amount of food.—Fleece glossy, and much sought for, for certain lustrous goods.

**OXFORD DOWNS.**—These are a Down cross breed of considerable importance; they have gray faces and legs, with fine and well set heads, small bones, deep brisket, round hams, flat backs, straight bellies, and rather short and fine legs. They are very gentle, quiet and orderly; easily kept thriving on

scant fare, and are very prolific. The lambs thrive very fast, often attaining 100 pounds weight at five months of age. This breed yields a very desirable quality of thick and heavy wool.—W. H. W., in *Rural American*.

## USEFUL RECIPES.

The following recipes we glean from the *American Stock Journal*, published by N. P. Boyer & Co., at Gum Tree, Pa.

**CASTRATING HOGS.**—If the pig is not more than three months old, an incision is made in the scrotum, the testicles pushed out, and the spermatic cord cut without any precautionary means whatever. But when the animal is older, there is reason to fear that hemorrhage to a greater or less extent will supervene; consequently it will be advisable to pass a ligature around the cord a little above the spot where the division is intended to take place. A little ointment may be rubbed on the parts. The best time for castrating or spaying is in the fall or spring of the year, or any time when it is not too cold or warm.

**TO PREVENT HORSES OVERREACHING.**—Make the shoe its natural length, or a trifle longer, with the toe calk of the forward shoe high, and the heel calk low. The hoof will then stand further forward and more removed from the stride of the hind foot, which, being shod with a low toe calk and a high heel calk, will strike the ground before it reaches the fore foot. An interfering horse usually strikes with the inside of the hoof about two inches from the toe; therefore make the shoe straighter on the inside end and rasp the hoof accordingly.

**CURE FOR CANCER WARTS ON HORSES.**—A correspondent says: Last spring one of my mares had a large cancer wart on the side of her face about three inches below the eye, and after trying several kinds of medicines to no effect (only to increase the size of the wart) I made a salve of strong soft soap and common table salt, and three applications entirely cured it so that there are no signs of it any more.

**CURE FOR HOLLOW HORN.**—Take a handful of fine salt moistened with soft soap, rub thoroughly from the horns down each side of the back bone and across the loins.—Feed on green food, potatoes cut, or turnips, with a small quantity of bran sprinkled over them. Three or four applications generally effect a cure.

**SCOURS IN CALVES, SHEEP, PIGS.**—For scours in calves, pigs and sheep, a correspondent of the *Maine Farmer* takes a quantity of good oats, boils them one hour, and gives freely of the tea till a cure is effected. From many trials he is satisfied that the remedy is safe and certain.

**WORMS IN HORSES.**—We have found the following drench very effectual in expelling worms:—Aloes, four drachms; oil of wormseed, 20 drops; powdered male fern (*Aspidium felix mas*) 1 ounce: to be given in one pint of weak soap suds an hour before feeding.

**GROUND MOLES.**—Tramp down their burrows flat, and go out early in the morning and you can easily see where they are moving and catch them; or plant some corn soaked in arsenic where they will get it.

A GREAT many livery men bathe their horses hoofs two or three times a week in chamber lye, to toughen the hoof and keep it moist—its application is very useful to horses that are driven hard every day.

## The Poultry House.

### Disease Among Fowls.

To the Editors of Maryland Farmer :—

Can you through your valuable magazine supply a practical and efficient cure for a disease among poultry, which is stalking over this section of the country. Fowls, turkeys, ducks, and geese, all alike suffer from it, and frequently while apparently well in the morning are dead before night.

The symptoms are first, staggering and uncertainty of gait—very soon the bird ceases to move—the eyes close—the neck is bent over forwards, until the beak touches the breast, and the top of the head rests upon the ground—and so it dies. Chicks a few weeks old, and full grown birds are alike subject to the disease, and *very rarely* do any recover—and when it makes its appearance, it sweeps them off with all the malignity of the Asiatic Cholera.

Hoping this may reach the eye of some one able and willing to give a remedy. I am,

A SOUTH CAROLINA SUBSCRIBER.

[Can any one suggest a remedy for the disease as described above ; if so, will be pleased to hear from them ?]

The following we clip from the *Hanover Citizen*, Pa., as to a fatal disease now prevailing among the poultry of that section :—"We are informed that a disease has broken out among poultry in this section, which in almost every instance proves fatal.—The disease is said to be in consequence of so much wet weather. Mr. Jacob Trone, of this place, lost thirty turkeys in three days, and several farmers residing near town have lost large numbers of chickens and turkeys from the same cause."

**CHOLERA IN FOWLS.**—A subscriber sends the *Richmond Farmer* the following recipe, which he thinks should be published "for the general good" :

"As soon as the fowl shows any symptoms of it, give one teaspoonful of paregoric ; if not improved in eight or twelve hours, repeat the dose. One dose is generally sufficient to effect a cure. In small fowls give a less quantity, according to size."

**SALT FOR POTATOES.**—A correspondent of the *Sorgo Journal* has succeeded in raising good crops of large potatoes without rot, for the last fourteen years. He scatters a table spoonful of a mixture of lime and salt—one part lime and two parts salt—on each hill when the potatoes are six or eight inches high. He hills up the potatoes, but only once—when the buds for bloom appears. When dug he puts a quart of salt to each fourteen bushels of potatoes and keeps them cool and dry.

### Poultry-House for Six Varieties.

G. Morgan Smith, of South Hadley, Mass., communicates the following to the *Cultivator and Country Gentleman*, in reply to enquiries :

"C. S. D., Salado, Texas, wants a plan for a poultry-house for six varieties of fowls. I am building one for just that number. First my location is such that my poultry-house faces east and south—the building is 38 feet long ten feet in width. The height of the front is ten feet—height of rear seven feet—divided into six apartments—boarded up from the bottom three feet, and then slatted to the roof. The roof pitches one way—boarded with match boards and well battened. The front is boarded up three feet from the bottom, and each apartment has a large sliding window, with slats on the inside—each end has a slide window—on the east end an entrance door—and so through each division on the inside. The flooring is gravel. In the rear of the building is a small slide door for fowls to pass out into yards. Roost on the side of partition, three feet high. Cost of lumber here is \$25 per 1000—labor of carpenters \$3 per day. Total cost of house \$150, and will be satisfactory to one of the oldest breeders. If C. D. S. will send us a letter, will send him a draft of it."

**PENNSYLVANIA FARMING.**—A Cumberland county, Penn., farmer writes to the N. York Farmers' Club as follows :—"I plough clover sod in autumn or March, and lime 50 bushels to the acre, and plant with corn. This I harvest by cutting close to the ground, putting in shocks to cure. It is husked at the shocks, the stalks tied in bundles, hauled near the barn and stacked. In the spring the corn stubble is ploughed for oats. The oat stubble is dressed with barnyard manure, ploughed and harrowed, and left until it is time to sow wheat ; then go over with a large cultivator, and afterwards drill in the wheat. If intending to make the field into mowing-land, I sow three pecks of timothy seed (per ten acres) with the wheat, and in the spring one bushel of clover seed. Our farms in Cumberland county are generally so divided that we have two parts for corn, two for oats, two for wheat, two for mowing, and one for pasture. This is our regular rotation. Our grass crops are heavy, and generally 40 to 50 bushels of corn to the acre, 40 to 50 bushels of oats, and 15 to 25 bushels of wheat."

A lady says the first time she was kissed she felt like a tub of roses swimming in honey, cologne, nutmegs, and cranberries. She felt also as if something was running through her nerves on feet of diamonds, escorted by several little cupids in chariots drawn by angels, shaded by honeysuckles and the whole spread with melted rainbows. [Wonder if she ever recovered such a shock.]



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The first term of this institution will open on the 15th of September next, and close with the month of January. The College has resumed its duties under highly favorable auspices. The faculty, as announced, is composed of gentlemen of acknowledged abilities—at the head of which is Charles L. C. Minor, M. A., of Virginia, President. We would call the attention of parents and guardians to this College as every way worthy of their patronage.

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Subscription to the RURAL alone \$3 per year—to the FARMER, \$1.50—both for \$3.50.

## THREE FOR \$5.

The "*Rural New-Yorker*" \$3—The "*Southern Cultivator*" \$2, and the "*Maryland Farmer*" \$1.50 per year, will be furnished at \$5 for the *three*. Thus for \$5 can be secured *one* first-class *weekly* and *two* standard agricultural *monthlies*. Subscriptions can commence at any time.

## DEATH OF WM. N. WHITE.

Just as we go to press, we learn through a private source, and with feelings of deep regret, of the death of WM. N. WHITE, editor of the leading Southern agricultural journal, "*The Southern Cultivator*," over which he had presided with so much ability, for so many years. The decease was a gentleman of great energy and force of character, and an ardent and devoted friend to the progress of Southern Agriculture, in which cause the better part of his life was devoted. We have not learned the particulars or date of his death, but know his loss will be keenly felt by the entire South. His many noble qualities of mind and heart had endeared him to thousands all over the country.

## THE PROPOSED STATE AGRICULTURAL BUREAU.

We have before us the speech of Major Giddings, of Anne Arundel, before the State Convention at Annapolis, in advocacy of the organization of a Bureau of Agriculture under State auspices. The speech, we regret to say, is too long for our columns or we should have been happy to have reproduced it entire. We have already alluded to the proposition of Major Giddings, and entirely coincide with him in the opinion that we must seek for our agricultural settlers among the laboring populations of Europe.

The following remarks are quite suggestive :

Now, Mr. President, what do we propose in our report ?

First ; To establish the office of Superintendent of Labor and Agriculture, and we propose to have that officer elected by the people, and we would recommend that his term of office should be as long as that of the Governor, and for reasons which I will state further on. We propose in the first place, that he shall perform the duties now devolved by law upon the Commissioner of Emigration and the Immigration Agent, except such of them as are manifestly profitless to the State. By an Act passed in February, 1866, the office of Commissioner of Immigration was established, and the Governor was authorized to appoint the officer. It prescribes his duties and provides a salary of \$1,500 for himself, \$1,000 for his clerk, and an allowance of \$2,000 for contingent expenses, making in all \$4,500 for the support of this office. By a subsequent Act passed in March, 1867, the office of Immigrant Agent was established, and the act also designated a gentleman to fill it for two years, at an annual salary of \$2,000, and an allowance of \$1500 for his travelling expenses. It will hence be seen that the united cost of these two offices, designed for the same important object is \$8,000 per annum, and these are the offices which we propose to blend, and thus save something to the State. \* \* \* \* \*

The true remedy for the present and threatening evils, will not, I think, be found in that Northern capital and Northern enterprise, about which we have heard so much talk of late years, but in that increased population and labor which would occupy and make profitable our many deserted fields, and place the prosperity of our land-holders upon a more stable basis. \* \* \* \* \*

Let us then, while we yet can, make some efforts to augment the productive labor and political power of our State. Organized as this office would be, it must in some, if not in all of its duties be of great service ; and if it should succeed in attracting any considerable amount of immigration to Maryland it will add, in the words of one of my correspondents, "untold wealth and boundless comfort to our people." Its establishment will at once save to the treasury some thousands of dollars, for we should not, of course, pay the Superintendent and his clerk more than one-half the amount now expended upon the two existing offices. As to the sum to be appropriated in directly aiding immigration, that is left to the discretion of the General Assembly ; and I suppose would depend very much upon the reports of this Superintendent. It might so happen that a considerable body of people, like the colony of Poles recently settled in Spotsylvania County, Va., might all desire to come together and settle near each other in some particular locality previously selected. In such a case, upon the report and recommendation of this Bureau, the

Legislature might think it expedient to grant more substantial aid than if the new comers had not made choice of homes before their arrival. With even the present appropriation of \$8,000, if applied to one office, I think that a great deal might be done. I am informed that hundreds of laboring men annually sail from Liverpool for N. York, who might readily be induced to sail for Baltimore, and seek for labor in Maryland, if they could thereby save a few dollars in the cost of their passage ticket. Now, if this be so, and I have no reason to doubt it, what better or cheaper scheme could the Superintendent devise than to send some one well qualified agent to that port of general departure, and authorize him to sell tickets to Baltimore, for say \$4 or \$5 less than the cost of those by any other of the Atlantic lines of travel. Of course the necessary contracts for this business would have to be negotiated beforehand between this department and the Baltimore Transportation Companies ; and our foreign agent should be required to carefully abstain from extending this aid to any but such as were likely to become useful and valuable citizens.

It will be seen that under this plan, even the small appropriation of \$4,000 or \$5,000 might procure for use nearly or quite a thousand industrious settlers, and many of them would, perhaps, be men who possessed some means, and who would be prepared to rent or purchase farms.

I would also require a register to be kept in our Liverpool office, of the names and post office address of such of our citizens as might desire to employ laborers of any description, with their tariff of wages, and any other information which would enable emigrants, if they desire to do so, to select their new homes, even before leaving their native shores.

The chief labor market will undoubtedly be found in Germany. This class of immigrants is, as a general rule, thrifty, quiet and industrious. At present German agents abroad are sending quite a number of colonists to Brazil. But recent advices from that distant region indicate so much dissatisfaction among the new settlers, owing to the terrible losses they have sustained from diseases incidental to the climate and from other causes, that Commissioners have been sent from Germany to investigate matters. In the meantime the colonists have become disheartened, and would return home if they could. Why is it not possible to divert the current of emigration in this direction ?

**SALE OF VALUABLE STOCK.**—Col. Edward Wilkins, of Kent county, has recently purchased, through Messrs. John Merryman & Co., two fine Alderney cows, one of which was imported, from the herd of Ross Winans, Esq. Imported cow "Daisy," from the herd of Edward F. Jenkins, Esq., and a thorough-bred Alderney cow and calf from the herd of Charles Ridgely, of Hampton.—We congratulate our friend Col. W. upon procuring these fine animals, which must prove a valuable acquisition to the country in which he resides.

**COTSWOLD SHEEP.**—The attention of those in want of this breed of sheep is called to the advertisement of Geo. Jackson, Esq., near Wilmington, Delaware. Those desiring to purchase can rely upon their purity.



FOR THE MARYLAND FARMER.

**A VALUABLE COW.**

The readers of agricultural journals are, I think, impressed with the idea that to have superior animals of the cow kind there must be a large herd, and that to receive a premium or commendation in any shape the owner must be at least a Colonel; if a General, so much the better.

Without possessing either of the above pre-requisites, I think I can show a cow that in all essentials will compare favorably with any that the most celebrated breeders can produce.

The cow in question was purchased a few years ago from the late Dr. Taintor, of Connecticut, as an Alderney, at a moderate price. She calved on the 6th of April last. During the latter part of June and two weeks of the present month, her milk was carefully kept by itself, and the product in butter correctly weighed; the result being first week, 16½ pounds; second week, 15½ pounds; third week, 16½ pounds. No feed of any kind except grass, with access to water only at morning, noon and night.

The product of the second week was I believe lessened by the cow being exposed to rain on Sunday, Monday and part of Tuesday night of that week.—The third week's test commenced with the milking of Friday afternoon, July 12th, and ended with the milking of Friday morning, July 19th, and was without doubt aided by the clear, cool weather which prevailed at that time.

My desire is to show parties who, like myself, can keep but a few cows the great advantage of having the best that can be procured. I have none to sell.

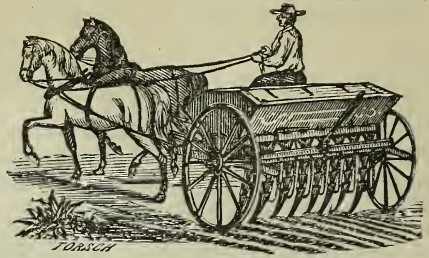
HAMILTON EASTER.

Baltimore, July 23d, 1867.

The above article is suggestive, and, irrespective of the merits of the cow, shows the advantages of high feeding.—[EDS. FARMER.]

**RODUNDA GUANO.**—We would call attention to the advertisement of Wm. Crichton & Son, of Baltimore, to the Rodunda Guano, which has now been in this market for about two years. It is fully endorsed by Dr. David Stewart, formerly Chemist to the Maryland State Agricultural Society. It is fine and dry and well conditioned to be used with the grain drill, and is sold at the low price of \$30 per ton. We refer the trade and the farmer to their advertisement.

**KENTUCKY STATE AGRICULTURAL EXHIBITION.**—The Ninth Exhibition of this Association will be held on the fair grounds of the Louisville and Jefferson County Association, near Louisville, Ky., on September 17th to 21st, 1867. We have received from James J. Miller, Esq., Secretary, of Frankfort, the List of Premiums and Rules and Regulations adopted for the occasion.



### Advantages of the Drill in Seeding Grain over Broadcast Sowing.

A writer thus sets forth the advantages of drilling in seed over broadcast sowing. The now almost universal use of the Drill is the strongest evidence of its advantages that could be adduced.

The experience of the farmers of England, and other portions of Europe, in drilling in the seed of small grain, has long since established the advantages of this method of seeding. Indeed, the English farmers are not satisfied with the great advantages of the drill over broadcast sowing, but they even go to the still greater expense of dibbling in the seed by hand in order to secure greater uniformity in the depth and manner of depositing the seed. But in our country the low price of land and the scarcity of labor require that we should adopt some more expeditious method of seeding, and at the same time secure the greatest possible benefits, over the primitive method of scattering the seed promiscuously over the land, without regard to depth or distance.

In broadcast sowing from one-eighth to one-quarter of the seed is lost by being either covered too deep, or by not being covered at all, and liable to be picked up and devoured by birds, &c., before it begins to vegetate. Seed deposited so irregularly, exposes the plants to injury from drought, as well as to the action of frost in heaving the roots out in winter. The various improvements made in the grain drill have rendered it quite perfect, so much so that any required quantity of seed may be dropped upon an acre, and at the same time at a uniform depth. The action of the drill upon the land leaves the ground in the best possible condition to protect the crop during winter from the washing rains and the injurious action of frost. Running the drills north and south, when practicable, secures another great advantage in giving free access of sun and air, and thus in a great degree checking the tendency to rust.

Besides the saving in the amount of seed sown, it has been ascertained that on most lands the drilled wheat will yield from three to five and more bushels per acre over that which is sowed broadcast in similar soil. Take the number of acres of land sown to wheat in any one State, and estimate the gain by

this method of seeding, and it will amount to millions of dollars annually, enough to purchase a drill for every farmer in the State, and then leave a large surplus besides.


Among the many improvements recently made in the grain drill, we cannot recommend one over another. But it is better to buy a good one, at almost any cost, than to receive a poor one as a gift, and so of any other implement or machine. We might have said in order to use the drill with success, the land must be well prepared, and all the weeds and rubbish must be turned under, below the action of the drills. A thorough preparation of this kind more than pays for the labor bestowed, in other respects.

Every farmer who has ten acres of land to sow, would do well to secure a good drill in time for the coming fall.

### ICE HOUSES.

No one in the country should be without an Ice House. Ice has now become almost a *necessary* of life, and can scarcely be classed among the *luxuries*. But few families in the cities can afford to be without ice, and it is served to them in the summer, as regularly as their milk. Those who have no ice house should lose no time in making arrangements to have one, in time for the winter, and to aid them in its construction, we offer the following plans:

#### Cheap Ice House.

Permit me, through your "Farmer," to give my plan of building a very simple and cheap ice house, as follows: First, dig out a hole, say 12 by 15 feet on the surface, tapering gradually as you descend, to a depth of 10 to 15 feet, as desired. The *taper* should be sufficient to prevent the caving in of the sides or banks. In the bottom of this pit, lay a few logs, pieces of wood, &c., so as to allow drainage, and the drippings to pass below the body of the ice. Having thus prepared the *frame* of the house, you will next proceed to cover the same, as follows:—Procure from the forest, two forked or pronged logs of some 10 to 12 inches in diameter, and plant one at each end of the pit, far enough from the edge to avoid caving in—the height about 5 feet from the ground—and in these prongs lay a log or ridge pole, of about same diameter as posts, which will form the centre rest of roof. You are now ready to put on the *lathes*, which are no more than poles set up, one end on the ground, and the other resting on this ridge pole, forming this shape . Set these poles pretty thick, and after covering with straw, &c., throw the earth that came from the pit all over the logs to the depth of 10 to 15 inches—first constructing a *small door* at one end, through which to fill, and get ice from. You will then have an efficient and cheap ice house as can be made, though

not very ornamental. The writer has used such a house for a number of years, and always had an abundance of ice over at the end of the season. In filling with ice, cornstalks, straw, saw dust, spent-tan, &c., should be thrown around the banks to keep the ice from the earth and protect it from the heat. Also pack and cover closely with straw, &c., to keep air from the ice. The house should be thoroughly cleaned of old straw, &c., every fall, or before new ice is deposited therein. Try this plan, you that want a cheap affair, and we feel confident that it will prove satisfactory. RETSURE.

A CHEAP ICE HOUSE.—A writer submits the following plan for a cheap Ice House:

"For the benefit of those who wish to enjoy a little cool luxury during long, hot summer days, I send you the plan of a cheap Ice House in which I kept ice from February to October, using from it every day after warm weather commenced. Nailed up a pen, 10 by 12 feet, four feet on the ends, seven feet on the sides, leaving the gable ends open—the ground descended about one foot in twelve—filled in saw-dust about six or eight inches deep—sawed the ice as square as possible with a cross-cut saw, and packed it in, leaving a space of a foot on the sides all around. Pounded the cracks between the ice full of fine ice; filled the space around with saw-dust, stamping it down so as to make it close as possible; then covered the whole 12 or 15 inches deep with saw-dust and put on the roof. After warm weather commenced I generally went over it once a week to see if there was any melting; if there was I pounded the place full of saw dust.—This house will hold from 2½ to 3½ cords. If it is allowed to freeze solid, more will be wasted than used. I have tried that plan, but if left as it is packed you can roll out a block and saw off with a hand-saw as much as is wished."

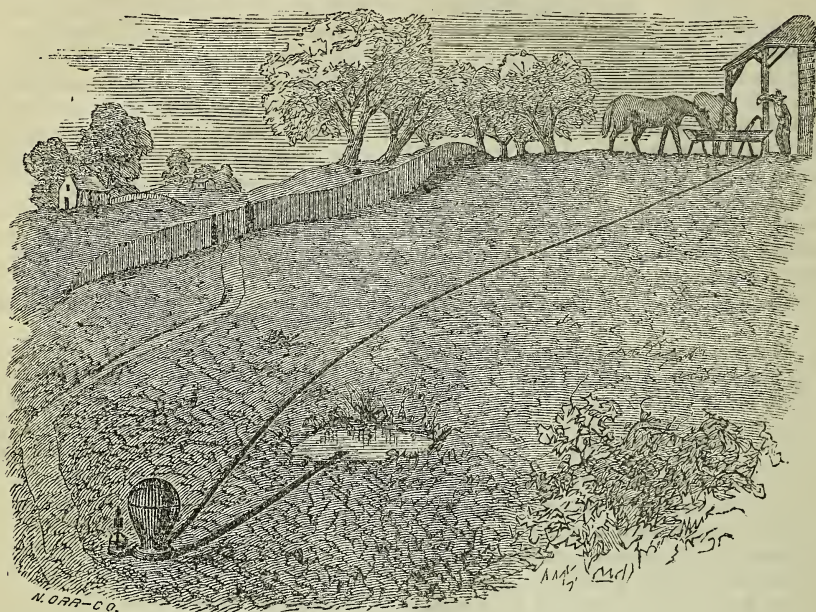
#### ANOTHER.

A farmer in Seneca Falls, writes: "We have kept ice for two seasons past in our wagon-house, taking up the floor in one corner and making what you might call a large bin, about nine feet square, extending from the ground up to near the chamber floor, but not quite, leaving room for a free circulation of air above the covering of the ice and the floor overhead.

There was slope enough to the bottom for thorough drainage, which is an important matter, in my opinion, as well as the open space above. We placed in the bottom about a foot thick of saw-dust and turner's shavings, then some loose boards for the ice to rest upon, and piled it up in the centre, leaving a space all around of fifteen or sixteen inches between the ice and sides of the bin, until we had six two-horse loads in, when we filled in the sides with saw-dust and shavings from the planing mill, tramped it down solid, covered the ice well on top with same material, and had nothing more to do with it until we wanted to get it for use, which was a very easy matter, having of course left a door or opening from the wagon-house into the ice-room."



## HYDRAULIC RAM.



This figure shows the Hydraulic Ram put up in practical operation, except that the Ram should be placed down in a pit two or three feet deep, and the pipes properly covered under ground, so as to be out of the way of frost and other injury.

## HYDRAULIC RAM.

The simplicity of the operation of this machine, together with its effectiveness and very apparent durability, renders it decidedly the most important and valuable Apparatus yet developed in Hydraulics for forcing a portion of a running stream of water to any elevation, proportionate to the fall obtained. It is perfectly applicable where no more than 18 inches fall can be had; yet the greater the fall applied, the more powerful the operation of the Machine, and the higher the water may be conveyed. The relative proportions between the water raised, and wasted, is dependent entirely upon the relative height of the spring or source of supply above the RAM, and the elevation to which it is required to raise—the quantity raised varying in proportion to the height to which it is conveyed, with a given fall; also the distance which the water has to be conveyed, and consequent length of pipe has some bearing on the quantity of water raised and discharged by the RAM, as the longer the pipe through which the water has to be forced by the Machine, the greater the friction to be overcome, and the more the power consumed in the operation; yet it is common to apply the Ram for conveying the water distances of one and two hundred rods, and up elevations of one and two hundred feet. Ten feet fall from the Spring or Brook to the Ram, is abundantly sufficient for forcing up the water to any elevation under say one hundred and fifty feet in height above the level of the point where the Ram is located: and the same ten feet fall will raise the water to a much higher point than above last named, although in a diminished quantity in proportion as the height is increased. When a sufficient quantity of water is raised with a given fall, it is not advisable to increase said fall,

as in so doing the force with which the Ram works is increased, and the amount of labour which it has to perform greatly augmented, the wear and tear of the Machine proportionably increased, and the durability of the same lessened; so that economy in the expense of keeping the Ram in repair would dictate that no greater fall should be applied for propelling the Ram, than is sufficient to raise a requisite supply of water to the place of use.

To enable any person to make the calculation as to what fall would be sufficient to apply to the Ram to raise a sufficient supply of water to his premises, we would say that in conveying it an ordinary distance, or say 50 or 60 rods, it may be safely calculated that about one-seventh part of the water can be raised and discharged at an elevation above the Ram, five times as high as the fall which is applied to the Ram, or one-fourteenth part can be raised and discharged, say ten times as high as the fall applied; and so in that proportion as the fall or rise is varied. Thus if the Ram be placed under a head or fall of five feet, of every 7 gallons drawn from the Spring, one may be raised 25 feet, or half a gallon 50 feet. Or with 10 feet fall applied to the machine, of every 14 gallons drawn from the spring, one gallon may be raised to the height of 100 feet above the machine, and so in like proportion, as the fall or rise is increased or diminished.

The various uses of the Ram, are at once obvious, viz: For the purpose of Irrigating Lands, Supplying Dwellings, Barnyards, Gardens, Factories, Villages, Engines, Railroad, Stations, &c., with running water.

W. & B. Douglas, Middletown, Connecticut, are the manufacturers of these improved machines.

Prices of these machines range from \$8 to \$150, according to size and capacity.

## OLD RECIPES FOR MAKING CIDER.

"COLONUS," of Harford county, Md., has revived, through the columns of the *Turf, Field and Farm*, two old recipes for making cider, as practised by Nicholas Nall, Esq., of the South, and Thos. Hillen, Esq., of Baltimore county. They bear date of July 1819. We give Mr. Nall's method as communicated by Gen. Calvin Jones, of Raleigh, to the *Plough, Loom and Anvil*, edited by the father of the agricultural press, the late John S. Skinner.

"All apples fit to be eaten will make good cider. The grand secret is in cleansing it from the filth and dregs as early as possible. Each sort of apples are to be beaten and pressed by themselves. Two kinds of juice, both good, would, if mixed often, make bad cider. Throw out all imperfect, sorry and sun burnt apples, as well as dust and trash. Beat your apples before much mellowed, as they lose their strength, soundness and spirit, if too mellow. Let them stand half a day after being beaten, before put into the press; then press them slowly; discontinue it as soon as the juice appears thin and watery. The advantage of slow pressure is in making the liquor run pure. Let your casks, previously well cleansed, be filled quite full, to permit the froth and pumice to discharge itself at the bung. When the fermentation abates, cover the bung closely with something that may be lifted by the fixed air that escapes during the future fermentation. In a week rack off the cider carefully, ceasing the moment you observe it to run muddy; now stop the cask more firmly. In ten days rack it off a second time, and in fifteen days a third time. In every instance the cask is to be clean and perfectly filled; and when filled for the last time, to be bunged close in a deep, dry cellar, never to be moved until drawn for use. Late cider need not be racked until March, and then one racking, or at most two, will be sufficient. Be very careful that no water, not even the little that will adhere after rinsing the cask, is mixed with the cider. The smallest quantity of rain water will render cider unfit to keep. The addition of any quantity of distilled spirits is not only useless, but injurious."

"Mr. Nall's method is the result of long experience, and its success justifies me in recommending it to the public. I hope it will be tried.

"N. B.—I ought to have mentioned that Mr. Nall told me he had for many years tried various plans for clarifying cider, to prevent its souring, by means of milk, isinglass, scalding and skimming, filtering through sand, &c., and found all useful, but is satisfied that frequent racking or drawing is far preferable to any other method he has attempted.

The following is Mr. Hillen's method, whose reputation for producing first quality cider was widely known in his time and generation:

"Were I to attempt a word of advice to your correspondent on the subject of *making* cider, it would be to avoid all rotten fruit, leaves, &c., pick up his apples as early as possible of mornings, when cold, or at least cool, and grind them so; when ground strain it through a sifter into a large trough or cistern, let it stand two or three hours until the fine sediment falls to the bottom, then rack it off into clean casks, and let it stand and work until the foam begins to dry at the bung, then fill up the casks

with cider of the same quality, and stop them as tight as he can with straw bungs, or if wooden bungs, they must have ventilators for fear of bursting. When they become perfectly dry at the bung (if straw) drive a sharp plug into the bung to exclude the air; in November rack it off, through flannel, into clean casks again, and let it stand till spring for bottling."

A correspondent in *Colman's Rural World*, gives the following on making Cider:

Several methods have been given how to make a good cider that will keep. The use of *sulphite of lime* has not given satisfaction, because of communicating an unpleasant flavor. Concentration, by boiling, is objectionable on account of the trouble: and boiling impairs that fruitiness that gives character; and in the boiling it is apt to be burned.

Concentration by freezing is certainly the simplest and best method. During the winter, when the frost is not *very* severe, empty the cider to be concentrated into tubs: or, what is better, large shallow coolers, having a spigot in the bottom. Let the cider freeze and remove the cake of ice (which is the water): if necessary repeat the operation till it is reduced from one-half to one-third, as is desired, and return the cider to the cask after being cleaned.—We can thus easily have it of any strength.

We have used it reduced to one-fortieth of its quantity. We have had it, kept by this process fourteen years, and it improved all the time, till it was a perfect treat to taste; its sweetness and flavor is unimpaired, only bulk is diminished by the removal of the water.

PRESSEY'S STUMP PULLER.—The trial of this admirable machine, in the presence of the visitors to the Strawberry Exhibition, at Hammonton, N. J., was a complete success, the machine, in its effective operations, more than verifying all we have said of it, in our columns. We hope to see this powerful ally of the new settler, generally introduced, believing it to be, beyond the peradventure of a doubt, the best thing of the kind ever brought before the public. Our opinion in this particular is based upon practical trial; we therefore claim to speak of what we know. Mr. PRESSEY resides at Hammonton, and is prepared to answer inquiries or fill orders, as may be desired.—*Hammonton Cultivist*.

A GOOD STUMP MACHINE.—Since our last issue, says *Moore's Rural New Yorker*, we have received two inquiries about Stump machines—one from Columbia, S. C., and another from Jefferson County, N. Y. There are several stump machines in use in Western New York, and only a few weeks ago a trial of four different patents was had in Steuben county. The trial was witnessed by one of our associates, and noticed in the *RURAL* of May 18—the result being a victory for the Willis Machine, made by W. W. Willis of Rochester, N. Y. Last week we attended a trial of the same machine in Greece, and from what we then saw of its operation are satisfied that it is a superior machine, if not indeed the very best obtainable. We therefore refer all wanting a stump machine to Mr. Willis."



## Horticultural.

### THE APRICOT AND PLUM.

The following on the apricot and plum we take from the *American Fruit Culturist*, edited by J. J. Thomas, and published by Wm. Wood & Co., New York :

#### THE APRICOT.

It is remarkable that a fruit of such excellence as the Apricot, and ripening from one to two months before the best early peaches, should be so little known. In its natural character, it is more nearly allied to the plum than the peach, resembling the former in its broad leaf, and in the smooth stone of its fruit; but downy like the peach, and partaking largely of its flavor and excellence.

The apricot is budded on seedling apricots, and on peach and plum stocks. Plum stocks are preferred, and are more especially adapted to heavy soils; on light soils, the hard-shelled almond and wild plum have proved excellent.

The soil should be deep and dry. Young trees have frequently perished from a wet sub-soil, even where the surface is not unusually moist. On suitable soils, it is as hardy as most early peaches. The trees have been commonly planted in the warmest situations, as on the warm side of buildings, or other sheltered site, facing the hot sun, where they have blossomed early, and as a consequence, the crop has not unfrequently been destroyed by vernal frosts. Hence, a northern or more exposed aspect would be far preferable. If trained on a building, the eastern side should be especially avoided, as a hot morning sun upon frosted buds would be nearly certain destruction.

The liability to the attacks of the curculio, and the very common destruction of the whole crop by this insect, has led to the erroneous conclusion that the apricot is not suited to our northern climate.—Several cultivators, as far north as forty-three degrees of latitude, by a systematic destruction of this insect, and by selecting a dry subsoil, often obtain heavy crops of this delicious midsummer fruit.—The mode of protection is fully described in the chapter on insects.

#### THE PLUM.

**RAISING THE YOUNG TREES.**—The plum is propagated by budding or grafting on seedling plums.—For this purpose the stones of such varieties should be chosen as are of large and thrifty growth; and they are to be treated in planting precisely as directed for the peach, with additional care to prevent the drying of the stones, which occurs much sooner in consequence of their smaller size and thinner shell. If not cracked, a part only will vegetate the first

year, although many may be made to open by the repeated action of freezing and thawing.

**STOCKS.**—On light or unfavorable soils, most of the common varieties produce feeble and slowly growing seedlings; an excellent substitute will be found in the larger sorts of the wild plum, sometimes known as the Canada plum (*Prunus Americana*.) Those varieties which are found to outgrow this stock, should be worked at the surface of the ground, and when transplanted the place of union should be set a few inches lower. On strong soils, where the plum grows freely, the common *Horse plum* (a blue, oval, rather acid sort) makes the best stocks. The French St. Julien is similar in character. The *Myrobalan*, or cherry plum, although slender in growth, succeeds better on light, sandy, or gravelly soils, and is also, like the Canada plum, employed as stocks for dwarfs.

On light soils, the peach has been occasionally employed. A very few varieties take readily and grow freely, and large healthy trees have in some instances been produced; but the great uncertainty which attends its use, and the failure with most varieties, indicate the propriety of the rejection of the peach for this purpose.

Grafting, to succeed best, should be done quite early in spring, before the buds have commenced swelling; and budding must be performed while the stocks are at the period of their most vigorous growth (provided sufficiently matured buds can be found,) which is usually soon after midsummer. If deferred, the bark will not peel freely, and the buds will not adhere.

The time required to attain a sufficient size for the orchard varies much with different sorts. The Imperial Gage, the Washington, Huling's Superb, and others, grow rapidly, and usually produce good trees in two years from the graft or bud; while such slow growing plums as the Primordian, Green Gage and Red Diaper, require a longer period.

**SOIL.**—The best soil, usually, is a strong, rich, clayey loam. On many light soils the tree grows with less vigor, independently of which the crop is more frequently destroyed by the curculio, a previous soil affording a more ready place of shelter for the young insects, on their escape from the fallen fruit. A few varieties are well adapted to rather dry as well as light lands.

In planting orchards, a suitable distance is one rod apart, giving one hundred and sixty trees to the acre. The ground should be manured and kept well cultivated, as the plum, especially when young, is sensitive to the effects of the weeds and grass of neglected culture.

#### The Demagogue.

I do despise these Demagogues, that fret  
The angry Multitude: they are but as  
The froth upon the mountain-wave—the bird  
That shrieks upon the sullen tempest's wing.

## GATHERING AND PACKING FRUITS.

Mr. Barry, in his *Fruit Book*, gives a very useful chapter on this subject, a part of which we copy :

"This is a branch of the general subject of fruit culture and management that requires the most careful attention ; for it is quite useless to take pains in producing fine fruits, without taking equal pains in gathering, preserving and sending them to the table or the market in a sound, sightly and proper condition. Very few fruit growers seem to appreciate this part of their business. Fruit dealers at home and abroad complain of the careless and slovenly manner in which our fruits are gathered, packed and presented in the market, and would gladly pay a double price for them in a better condition. The first consideration is :

*The period of maturity at which fruits should be gathered.*—The stone fruits generally are allowed to reach perfect maturity, or within four or five days of it, on the tree. In moist, cool seasons particularly, they are benefited by being gathered a few days before maturity, and allowed to ripen in a dry, warm room ; they part with the water contained in their juices, which thus become better elaborated and more sugary and high flavored.

Summer pears, too, on the same principle, require to be gathered, as a general thing, from a week to a fortnight before their maturity. Sweet varieties, and such as are inclined to become *mealy*, are entirely worthless when ripened on the tree, and many very excellent varieties are condemned on this account. Such as these should be gathered the moment the skin begins to change color in the least degree.

Summer apples, too, and especially those inclined to *mealiness*, should be picked early—as soon as the skin begins to change color, otherwise they part with their juices, and become worthless. Ripeness is indicated by the seeds turning dark colored, and by the stem parting readily from the tree when it is lifted upward.

Winter apples and pears should be allowed to remain on the trees as long as vegetation is active, or until frosts are apprehended.

Grapes, berries, &c., are allowed to attain perfect maturity before being gathered.

*Mode of Gathering.*—Unless it be a few specimens wanted for immediate use, which may be taken with some of the contrivances mentioned under the head of implements, all fruits should be gathered by the hand. The branch to be gathered from should be taken in one hand, and the fruits carefully taken off, one by one, with the other, with their stems attached. (For fruits neither keep so well, nor look so well, without the stems.) They are then laid carefully in single layers, in broad shallow baskets, the

bottom of which should be covered with paper or moss, to prevent bruises. Peaches and other soft fruits should be pressed as lightly as possible, for for anything like a squeeze is certainly followed by decay in the form of a brown spot, and this is the reason why it is so exceedingly difficult to find a perfectly sound, and at the same time ripe, peach in our markets.

When more than one layer of fruit is laid in the same basket, some soft paper, dry moss, hay, or other material, ought to separate them, for it is difficult to place one layer immediately upon another, and especially if the fruits are approaching maturity, without bruising them more or less. Fruit should only be gathered in dry weather, and in the dry time of the day.

*Disposition of the Fruits after Gathering.*—When they are thus in the baskets, if summer fruits, they are either carried into the fruit room and arranged on shelves or tables in thin layers, or they are carefully transferred one by one into market baskets, and carried to market on an easy spring wagon, if not by steamboat or railroad, by which jarring or jolting will be avoided. Treated in this manner, they will be in a marketable condition, and one basket will sell for as much as four, carelessly picked, thrown into baskets, and tumbled out of them into a barrel or wagon-box.

Ripe fruits may be kept in good condition for a considerable period of time, in an ice-house, or in some of the recently invented fruit preservers, and even in very cool dry cellars. The vessels in which they are deposited should be perfectly clean, that no unpleasant flavor may be imparted to them. Peaches have been sent to the East Indies, by being properly packed in ice ; and it may be that methods of packing and preserving will, before long, be discovered, that will give us access to the markets of other countries, even for our perishable summer fruits.—We have seen Seckel pears in a very good state of preservation in January, exhibited in the Horticultural Society's rooms in Boston. The science of ripening and preserving fruits is but in its infancy, and Horticultural Societies that have the means will be doing a great public service by offering liberal premiums that will incite to experiment on the subject."

*ECONOMY IN SHINGLES.*—To those who are about shingling their buildings, it may be a benefit to be reminded that shingles made from many kinds of wood, such as fir, hemlock, etc., will last about twice as long as usual if immersed for a few minutes in strong lime water, which has about as much salt as will readily dissolve in it. Old meat or fish pickle will answer very well for this purpose. Shaved shingles are much more durable than sawed ones.



## FRUIT LIST.

The following list of fruits adapted to the several latitudes, we copy from J. J. Thomas' "*American Fruit Culturist*."

## APPLES.

*List of Apples for Pennsylvania, Northern Maryland, &c.*

SUMMER.—American Summer Pearmain, Red Astrachan, Early Harvest, Sum. Rose, Sweet Bough, Summer Queen.

AUTUMN.—Fallawater, Fall Pippin, Porter, Maiden's Blush, Townsend.

WINTER.—Baldwin, Bullock's Pippin, Rambo, R. I. Greening, Roxbury Russet, Smokehouse, Wine.

*Apples for Virginia and adjacent region.*

Carolina Red June, Gravenstein, Belmont, Fall Pippin, Yellow Bellflower, Smokehouse, Rambo, Smith's Cider, Male Carle, Maiden's Blush, Loudon Pippin, Limber Twig, Fallawater, Pryor's Red.

*Select List of Twelve Varieties of the Apple, by Joshua Lindly, of North Carolina.*

Summer Rose, Carolina Red June, Summer Pearmain, Wilson's Summer, (Am. Red Juneating?); Magnum Bonum, Gold. Russet, Clarke's Pearmain, Winesap, White Wint. Pearmain, Vandevere, Hall, Rawle's Janet.

*List of Apples for Georgia and adjacent region, made for this work, by Wm. N. White, of Athens, Ga., author of "Gardening for the South."*

*Best Three.*—Shockley—(quality not up to the mark, but its other merits make it desirable.)—Red June, Buncombe, or Meigs.

*Best Six.*—Red June, Horse, Meigs, Mangum, Nickajack, Shockley.

*Best Twelve.*—Early Harvest, Red June, Bachelor, Horse, Meigs, Disharoon, Green Crank, Mangum, Kentucky Streak, Nickajack, Stevenson's Winter, Shockley.

## PEARS.

The Pear is less affected than the Apple by differences in latitude and longitude, but more influenced by soil and cultivation.

*List of Pears succeeding in twenty or more States.*

Seckel, Bartlett, Flemish Beauty, Louise Bonne of Jersey, Belle Lucrative, Tyson, Winter Nelis, Beurre d'Anjou, Easter Beurre, Buffum, Summer Doyenne, Beurre Diel, Urbaniste, Vicar of Winkfield, Lawrence, Bloodgood, Duchesse d'Angouleme.

*List by Wm. N. White, of Athens, Ga., and adapted to the Southern States.*

*Best Three.*—Bartlett, Seckel, Lawrence.

*Best Six.*—Doyenne d'Ete, Bartlett, Belle Lucrative, Seckel, St. Michael Archangel, Lawrence.

*Best Twelve.*—Doyenne d'Ete, Beurre Giffard, Bartlett, Buffum, Belle Lucrative, Seckel, St. Michael Archangel, Beurre Bosc, Columbia, Lawrence, Winter Nelis, Josephine de Malines.

*Three good on Quince.*—Louise Bonne of Jersey, Duchesse d'Angouleme, Easter Beurre. For six, add Glout Morceau, Columbia, Beurre Diel.

## PEACHES.

*Select List of approved sorts ripening in order named.*

Hale's Early, Serrate Early York, Early Tillotson, Cole's Early Red, Early Newington, Troth's Early, Large Early York, George the Fourth, Grosse Mig-

nonne, Crawford's Early, Brevoort, Nivette, Bellegarde, Morris White, Oldmixon Free, Bergen's Yellow, Druid Hill, Ward's Late Free.

*List for Southern States, by Wm. N. White, of Ga.*

*Best Three.*—Early Tillotson, Crawford's Early, Heath Cling.

*Best Six.*—Early Tillotson, Crawford's Early, Stump the World, Oldmixon Cling, Washington Cling, Heath Cling.

*Best Twelve.*—Early Tillotson, Amelia, Crawford's Early, George the Fourth, Stump the World, Crawford's Late, Chinese Cling, Oldmixon Cling, Washington Cling, Heath Cling, Nix Late, Lemon Cling.

## SELECT LIST OF PLUMS.

*In the order of their general approval.*

Washington, Coe's Golden Drop, Green Gage, Imperial Gage, Lombard, Smith's Orleans, Prince's Yellow Gage, Reine Claude de Bavay, Jefferson, Lawrence Gage, Bradshaw, McLaughlin.

SELECT LIST OF CHERRIES.—*In the order of ripening.*

Early Purple Guigne, Belle d'Orleans, Governor Wood, Coe's Transparent, Black Tartarian, May Duke, Rockport, Early Richmond, Elton, Black Eagle, Yellow Spanish, Downer's Late, Belle Magnifique.

## SELECT LIST OF NATIVE GRAPES.

*In the order of ripening.*

Hartford Prolific, Adirondac, Israella, Delaware, Iona, Crevelling, Concord, Diana, Rebecca, Isabella, Allen's Hybrid, Maxatawney, Catawba.

The following—says the *Richmond Farmer*—for which we are indebted to one of our Virginia ladies, famed for her skill in farming, gardening and house-keeping, is the mode which we recommend with most confidence :

HOW TO DRY NICE FRUIT.—The weather should be dry and warm and the fruit perfectly ripe; slice it thin and spread on boards, or mats made of coarse white oak splints. If spread carefully, each piece separately, it will be dry enough to put in baskets or bags in the evening; but it will be necessary to put them out in the sun occasionally to prevent molding, or worms getting in. Stone fruits will take longer to dry. It is always best to peel the fruit at night, so as to put it out early in the morning. A good hand can peel a bushel at night with ease. Fruit dried in this way is of a light delicate color. It should never be allowed to remain out in the dew, as that makes it very dark and injures the flavor.

A NEW MANURE AND WHAT CAME OF IT.—A farmer near Erie, Pa., bought several barrels of spoiled sausages for the purpose of using them as manure, and put a link into each hill of corn. Before the next day, every dog that lived in a radius of four or five miles of the field, had been there digging sausages. The corn came up a little quicker than was bargained for, and did not prove the truth of the old adage that "where there is plenty of sashengs there ain't no dogs."

## Grape Culture.

### GRAPE GROWING.

Mr. Robert Buchanan, an experienced and successful grape grower, of Cincinnati, Ohio, gives the following on this subject :

Vineyards are usually planted on hills, or rolling uplands; such positions are chosen on account of the natural drainage, which is considered essential. Porous soils are preferred to stiff clay, or such as are retentive of water. No trees should be permitted to grow within one hundred feet of the vineyard, nor should any crop be cultivated in it, as the vine is a selfish plant, and demands all the ground for its own use. The ground is prepared for planting by trenching with the spade two feet deep, or by breaking up with a subsoil and common plow 18 or 20 inches; the latter is much the cheapest, and always adopted where the situation permits. In planting the vines, the distance apart in the rows appears to vary in different localities. Around Cincinnati and in the Ohio valley, 3 by 6 is the usual distance; on the shores of Lake Erie, 6 by 8, and 8 by 8, and in California, 8 by 10 is recommended as the proper distance. The object in this country, where labor is dear, is to cultivate with the plow where it can be used, and to avoid the spade, which is expensive.—Vineyard planting is a system of dwarfing the vine, but with our long-jointed and rampant growing native vines it may be an error to plant too close, or to prune too severely. Our European vine dressers, accustomed to short-jointed vines, naturally fall into that error here, but they are now correcting it.

The method of training, also, varies with localities. In the Ohio valley and the Southern States the single stake to each vine, and the bow system is adopted. On the lake shore and in California the trellis is used, the vines being trained on it horizontally.

The estimated average annual yield of good vineyards in the West is about that of France—200 gallons to the acre. In the South they claim 500, and in California 800; these latter I consider too high. A bushel of grapes—fifty pounds—will make three and a half gallons of good wine, and a half gallon inferior. In a mere sketch like this article, it is only intended to impart general information on the subject of which it treats. But I may remark, in brief, that a free exposure to the wind, with the bunches of grapes sheltered from the hot sun by the leaves of the vine, tying neatly to the stake or trellis, a judicious shortening in of superfluous branches, and the keeping the ground cultivated and free from weeds is considered essential.

The grape, like other fruits, has its enemies. The

most destructive of these is the mildew or rot. Was it not for this disease, the Catawba would be immensely profitable; but of late years, in the Ohio valley, it has destroyed from one-fifth to four-fifths of the crop in many vineyards, and discouraged some persons from planting that fine grape. A sudden change of weather from hot to cold when the vine is in rapid growth, and the seed in the berries about hardening, is sure to produce rot. A free under-drainage—either natural or artificial—and a full exposure to the wind, will in part prevent it. No system of pruning or cultivation has yet proved a sufficient remedy in vineyards. Vines trained against the side of a house, and under cover of the eaves, seldom, if ever, rot. The disease probably results from atmospheric causes, as the rust in wheat.

Insects have not as yet been found very injurious, but the careful vine-dresser will watch closely, and permit none to get colonized in his vineyard. The frost in some localities kills the young shoots of the vine in April, or early in May, but the twin or latent bud will put out, and yield about half a crop. To prevent serious injury by hail, let the bunches of grapes be well sheltered by the leaves of the vine, which will also prove a protection from the hot sun.

### WINE MAKING.

Mr. Buchanan, of Cincinnati, Ohio, gives the following directions for wine making. Being a gentleman of great experience, we presume they can be followed with safety :

“The well-ripened bunches of grapes are cut from the vine, and all unsound or immature berries picked out. Each day's picking is mashed at night, by pounding in a barrel with a beetle—stem and berries—or passing them through a mill. The contents are put upon a press, where about one-third of the best juice runs off without any pressure. After the first pressing, the outer edges of the ‘cheese’ are cut off for eight or ten inches, the parings thrown upon the top, and the screws again turned. This is repeated two or three times, but the juice from the last pressing is dark and astringent, and is only capable of making an inferior wine; hence it should be kept separate. The juice from the first pressing is put in large casks, allowing space for fermentation. No brandy or sugar should be added to the best Catawba juice, as it makes a better wine without, and is strong enough to keep well. One end of a syphon is placed in the bung-hole of the cask, and the other end terminates in a pail of water. The fermentation commences in a day or two, and the carbonic acid generated passes through this pipe and bubbles up through the water in the pail. This will show how rapidly the fermentation is going on, and when it ceases. In ten or fourteen days the syphon may



be removed, and the casks filled up, and the bung-hole driven lightly—in a month tightly. In mid-winter the wine is carefully drawn off into other casks, and the lees, added to the pomace of the grapes, are used to make brandy.

"The wine will be clear and pleasant to drink in a month or two after the first fermentation ceases. A slight second fermentation takes place in the spring, and it will only be necessary to loosen the bungs; when it is over, the wine will be clear in two or three months, and safe to bottle, but it is usually better to defer it until the following November. The only secret of wine making is to have well ripened grapes, perfectly clean press, casks and everything else used, and having the casks constantly bung full after fermentation, so that no air shall come in contact with the new wine."

### COTTON FIRES.

In the early part of 1860 the New York Board of Underwriters deputized I. H. Upton, to make an investigation into the causes of Fire in Cotton and Cotton laden vessels. In pursuance of such authority and instructions, Mr. Upton visited Charleston, Savannah, Mobile and New Orleans, and after a very thorough investigation, made a report which the recent frequent occurrences of fire in cotton in store and laden on vessels has induced the New York Board of Underwriters to republish.

After commenting fully upon the various sources of combustion, a number of suggestions and recommendations addressed to the Planter, the Inland Carrier, the Cotton Press, and the Shipmaster, are offered. We extract the following addressed

#### TO THE PLANTER.

1st.—To exercise great care that cotton is not packed wet, or with oily locks in the bale.

2d.—To use sufficient bagging to completely envelope the bale, so that no cotton may be exposed to accidental sparks. It would be well if some less combustible material were substituted for bagging.

3d.—The use of the iron tie commends itself for both economy and security. It enables the planter to put his cotton in market in better order, with less waste, and, in case of fire, enables much cotton to be saved which would be destroyed with rope.—Its persistence keeps the bale to a smaller size, and insures a greater degree of uniformity, enabling the vessel to stow more, and to better advantage.

4th.—In many instances too little care is taken to guard against stowing cotton in wet places. It should be protected from dampness by good dunnage, and, as far as practicable, have a sufficient covering from rain.

Question to a working gardener, "Of all your trees, which yields the most fruit?" Says he, "Sir, the best fruit comes from my *Industree*."

A young man, with a pair of fast horses, soon gallops through a fortune.

### Fertilizing Plants.

Few entomologists are aware, what an important part is played by insects in fertilizing certain kinds of plants. The old idea among Botanists was, that hermaphrodite flowers shed their own pollen upon their own stigmas, thus, as stock-raisers term it, "breeding in-and-in." But it has recently been shown, that there is an almost infinite variety of contrivances in Nature to prevent this, and that in many such cases bees and other insects, flying from flower to flower, convey the fertilizing pollen from one flower to another, and that without their agency either no seed at all, or seed inferior, both in quantity and quality, is perfected. It is remarkable that all flowers which are fertilized by the aid of insects are gaily colored, so as to attract insects; and Mr. Darwin observes that he does not know of a single flower, fertilized exclusively by pollen blown upon it by the wind, that is not of a dull unattractive appearance.—B. D. WALSH, in *Prac. Entomologist*.

FRUIT INSECTS.—Hovey's Magazine, advertising to the ravages committed upon fruit blossoms by the deposition of the eggs of insects in them, says that sprinkling the branches with a mixture of vinegar and water is reputed to be a certain preventive of these depredations. This should be applied as soon as the blossoms make their appearance, in the proportions of one part of vinegar and nine of water, if the former be very strong. If not, add more vinegar, and, when well mixed, sprinkle the flower buds with a garden engine, syringe or a common watering pot with fine rose nozzle. This application has proved effective whenever tried.

THE CELERY CROP.—The celery trenches require a good deal of watchfulness. There is no plant, perhaps, demanding more constant attention than this. Liberal watering twice a day, is one of the important requisites. In hilling up, or drawing up the dirt to the plants, great care should be taken not to apply too much soil at a time. Nothing retards the growth of celery more than injudicious hilling, in which the leaders are covered. The earth should be made fine, and the *hand* should be freely used in applying it properly, especially where more than one row is cultivated in the same trench. After the first hilling, an occasional application of *guano water* or other strong manure water has a marked effect in pushing celery ahead.—*Germantown Telegraph*.

FAST TROTTERS.—"A writer in the *Canada Farmer* gives it as his opinion that fast trotters are not the best for the farmer. I believe and know from experience that a well built, fast trotting, or blood horse, is the most suitable, not for the farm alone, but for such work as the farmer has to do. I think that a fast trotting horse is capable of doing any farm work, and is better for going to market or on a journey."

## The Apiary.

### BEEES AND BEE CULTURE.

"There are two things pertaining to the farm that are extremely profitable, but which can be successful only to a limited extent as to numbers.— Within those limits these two should fill the allotted space. These are poultry and bees.

Every farmer should keep bees. Many villagers and those on the outskirts of the city will also find it desirable, in a small way, but less so than is asserted by most writers on bee keeping. The difficulty lies in the want of a constant supply of food, from the first opening of spring to the closing of the season by frost.

Under the shelter of orchards, and with an abundant supply of white clover, the bee is a paying institution and one that the farmer cannot afford to dispense with.

There is an immense amount of bee literature to be had at the bookstores, the most of it valuable aside from the chapters on hives, which is generally a hobby, and should be taken with some allowance. Every book that one takes up contains this hobby, and the authors all own valuable patents; and if their word be taken, the bees will either not work in any other hive, or to no profit, unless it be the particular hive of the author, the right of which can usually be had for individual use for the small sum of five dollars.

Individual experience is always of value, and when divested of interest, doubly so. We are, therefore, writing this more to draw out this experience than to set forth any previous notion on this subject. One of the most successful bee-keepers in the State uses the common box hive, in the top of which is a space for honey boxes to be put on or taken off at pleasure, without disturbing the bees. Now, this is contrary to all the books, and yet this man has sent thousands of dollars' worth of honey to market, samples of which have graced the sanctum of the *Tribune* from time to time. On our own grounds are hives of various patterns, from the broad box hives, of 1,500 to 3,700 cubic inches of space and different forms of patent hives, all of which persist in giving surplus honey, varying from five to ninety pounds. A wide difference truly, which would lead one to suppose the best hive could easily be selected. Let us see. The ninety pound box is of Langstroth's patent, and yet a row of six hives, all made alike and filled with large swarms, do not average more than a like number of others.

From this, we come to the conclusion that the form of hive is of little consequence to the bee, so far as the making of honey is concerned; at the

same time it is of importance to the bee-keeper for the purpose of handling and safety in wintering, and for this reason we have a choice of hives.

Nearly all hives are a modification of what is called the Langstroth hive, the patent of which is said to expire in a short time, and a suit for which has laid dormant in some court for years.\* Of the merits of the controversy we have nothing to do, but the movable frame which is used in this hive forms the basis of great convenience in the handling of bees. These frames have been modified to suit the notions of different bee-keepers, but are all substantially the same thing.

Of three different kinds it is difficult to select the most valuable, as each has some peculiar feature to recommend it, and we suspect that the best hive would be one combining the good qualities of all without any attempt to invent something new.— New swarms can be made from each of these without natural swarming, though only one was made with this feature in view. A part of our swarm stands out in single hives, and a part in a regular bee house, but the swarms standing singly under the shade of trees appear to do the best; some of these are in showy hives, painted to imitate marble, with a roof to shelter from rain and snow. Of course these add much to the attractions of the lawn.

*Who should make our hives?* Not the farmer, for he seldom has either tools or proper material.— They should be made at a regular shop, with machinery for the purpose, and sold the same as doors or sash, ready for use. A good hive, with half a dozen surplus honey boxes, will weigh about forty-five pounds, and should not cost over five dollars, including glass back to the main hive and glass ends to the honey boxes.

No farmer should ever tolerate a patent bee-hive peddler for they are a public nuisance that should be abated. Order a nice, well made, movable frame hive of some reliable manufacturer and pay little attention about high or low chambers, patent ventilators or great honey making virtues. See that the lumber (pine) is well seasoned and well made up, and you may safely leave honey-making to the bee.

Sprinkling a swarm with sweetened water fumigated with tobacco smoke or burnt rags, will make bees quiet. A little oil of Anise to the water is useful. This is the famous bee charm of our charlatan bee men at State and county fairs, and for which the gaping crowd pay twenty cents a view. Divest bee keeping of its humbug and superstitions, and it will prove both pleasant and profitable.

There is no such a thing as a moth proof hive; daily watching and killing the worm is the only sure remedy. We have only attempted to throw out a few hints on the subject; let every bee-keeper buy some standard work on bees, such as Langstroth's, King or Quimby to aid him, and leave quackery to die a natural death."— *Chicago Tribune*.

\*This suit has since been decided in favor of the Langstroth patent, and his patent has been extended for seven years from 15th October, 1896.



## Ladies Department.

The following is from the Petersburg *Express*. We agree that the young lady who wrote it must have been rather fondish of boys and youths and men, and such:

### GOD BLESS THE BOYS.

ANSWER TO "GOD BLESS THE GIRLS."

God bless the boys,  
Who thrill our joys,  
With loving, tender kisses!  
Who squeeze our hands  
Or loose our bands,  
Of flowing silken tresses!  
Then romp and swing  
Us, o'er the spring,  
Adown the shady hollow;  
'Tis all the same,  
They're not to blame.  
Love leads, and they but follow.

### GOD BLESS THE MEN.

God bless the men!  
We say amen!  
Who buy us shawls and dresses,  
Or candied drops,  
Or lemon pops,  
Stand treat when heat oppresses!  
The ducks and dears,  
We'll soothe their fears,  
And show a heap of sorrow,  
Just as it suits,  
For gloves or boots,  
That's wanted for the morrow.  
Oh, can't we wile,  
And coax and smile,  
When they of cash seem weary,  
To get the "job"  
And ease their fob,  
Leaving them ne'er a "nary."

## KISSING.

A kiss is like a sermon: "It requires *two heads* and an *application*." It deals with the hidden spirit by means of tangible symbols. It is like faith, in that it is "the substance of things hoped for." It is the language of affection, the echo of love, and the concentration of bliss; it is of "good report," and pleasing to our ears; it is eloquence "dwelling with sweet accents upon the lips." It is both vocal and instrumental music, giving "vocal expression" to spirited "harmonies" in a language and with a sentiment intelligible in all languages and in all ages. It is the "seal" of a father's blessing; the witness of a mother's love, the "guarantee" of a brother's protection, the "surety" of a sister's devotion, the "gate" to a lover's heaven, and something that *were* friends have nothing to do with.

It is very fashionable for Misses of a certain age to insist that "it is all foolishness, and decidedly sickening."

We never hear such an expression without thinking of a circumstance that actually occurred, somewhere in Indiana, if we rightly remember. A gentleman stopped at a house by the wayside for information as to the route he was taking, and found a woman ironing, with her little child trying to amuse itself upon the floor; the little one was some two and a half years old, very neatly dressed, evidently scrupulously cared for, and eminently handsome. The gentleman while talking to the mother picked up the child and kissed it; the little one looked up in such perfect astonishment that the gentleman remarked, "Why my little dear, one would think that you were not used to being kissed." The mother answered for the child, "I don't believe, sir, that she was ever kissed before in her life. I'm sure I never did such a thing, and never knew its father to." The Lord have mercy on

that child and send it somebody to love it, was the gentleman's prayer, as he made sure his wallet was in its place, and took himself out of the house as fast as possible. Not to know the holy kiss of a mother, the fondling embrace of a father, the earnest lip press of brothers and sisters, is to fail in the development of the soul in an essential and vital degree; and surely what is so wondrously holy in infancy, so refining in childhood, so worthy in parents and so prevalent upon the hearthstone is not a matter to be disposed of with a sneer, or dismissed with a "Pooh!" Kissing, like the marriage bells or the blessed truths of the blessed Bible, never wears out; it is, like them, always new, fresh and interesting; and for the same reason, viz: it deals with the affections, which, unlike the intellect, loves the familiar; delights in the old, and is coy of the new and strange.

The variety of kisses is not small. There is the kiss paternal, the kiss fraternal, the kiss connubial (and pre-connubial), the kiss reverential, the kiss delightful (to an affianced), the kiss hypocritical, and the kiss promiscuous.

The last two varieties are the only ones to which we object. We have often thought in reference to the kiss promiscuous, one of the blessings of the man over the woman consisted in being relieved of this conventional duty; it seems to us in very many instances, like casting pearls before swine; and in illustration of the old adage, "Familiarity breeds contempt."

A man or woman who makes himself or herself common in this respect, must not wonder if they are not always appreciated.

Notwithstanding all that we have said we are not slow to confess that in many cases the practice is carried to unseemly and ridiculous lengths. What sense is there in a lady's receiving every feminine caller with the same expression that she should greet the return of a long absent brother or husband? Is it not a hypocritical lie for Mrs. Jones, to thus express affection for Mrs. Quidnunc, when in her heart Mrs. J., wishes Q., at home? Is it not outrageous to be expected to put a mother's lips to everybody's baby, clean or dirty?

[The following anecdote comes in very well here, to prove that there is something *very natural* in kissing:]

"As a weary traveller was winding his way through the mud in a far west region of the country, he discovered a young maiden seated in front of the door of a small log house. He rode up in front of the cabin, and asked the girl for a drink of water. He drank it, and she being the first woman he had seen for several days, offered her a dime for a kiss. The young maiden accepted the offer, and received both the kiss and the dime. The traveller was about to resume his journey, but the girl, never before having seen a dime, asked: 'what am I to do with the dime?' 'You may use it any way you wish,' he replied; 'it is yours.' 'If that's the case,' said she, 'I'll give you back the dime and take another kiss.'"

THE LAUGH OF WOMAN.—A woman has no natural gift more bewitching than a sweet laugh. It is like the sound of flutes on the water. It leaps from her in a clear, sparkling rill; and the heart that hears it feels as if bathed in the cool, exhilarating spring. Have you ever pursued an unseen fugitive through the trees, led on by a fairy laugh, now here, now there, now lost, now found? We have; and we are pursuing that wandering voice to this day. Sometimes it comes to us in the midst of care, or sorrow, or irksome business, and then we turn away and listen, and hear it ringing in the room like a silver bell, with power to scare away the evil spirits of mind. How much we owe to that sweet laugh! It turns prose to poetry; it flings flowers to sunshine over the darkness of the wood in which we are traveling; it touches with light even our sleep, which is no more than the image of death, but is consumed with dreams that are the shadows of immortality.—*Phrenological Journal*.

## GOOD NIGHT.

Good night, my love, the day god sips  
His evening cup of wine,  
And seeks repose on purple clouds  
That mark the day's decline.  
The tinkling of the distant bells  
Sweet on the evening gale  
Announce the homeward march of herds,  
Adown the dewy vale.  
The dew drop fills the lilly's cup  
From vintage high above,  
Distilled far up the ether stairs—  
Good night, good night, my love!

Good night, the violet nods her head,  
The blue-bell shuts her eye  
Upon a perfumed, mossy bed  
Where Flora's beauties lie.  
The humbird seeks her dewy nest,  
The weary robin folds her wing;  
And gently swaying linden boughs,  
Their leafy curtains fling.  
The firefly brings her little lamp  
To cheer us with its light,  
And crickets chirp their evening song;  
Good night, my love, good night.

Good night, the chiming of the bell,  
From out yon cloister grim,  
The flitting hours too truly tell  
In hollow accents dim.  
The lady moon, in fleecy robe,  
Her snowy curtains close,  
And little stars begin to blink;  
'Tis time they sought repose.  
The night bird in her leafy bower,  
No more our ears delight;  
E'en she has hushed her serenade—  
Indeed, indeed, good night!

## Teach the Women to Save.

THERE's the secret. A saving woman at the head of the family is the very best savings bank yet established—one that receives deposits daily and hourly, with no costly machinery to manage it. The idea of saving is a pleasant one, and if "the women" would imbibe it once, they would cultivate and adhere to it, and thus many when they were not aware of it, would be laying the foundation for a competence, security in a stormy time, and shelter in a rainy day. The woman who sees to her own house has a large field to save in, and the best way to make her comprehend it is for her to keep an account of current expenses. Probably not one wife in ten has an idea how much are the expenditures of herself and family.

Where from one to two thousand dollars are expended annually there is a chance to save something, if the attempt is only made. Let the housewife take the idea—act upon it—and strive over it—and she will save many dollars—perhaps hundreds—where before she thought it impossible. This is a duty—not a prompting of avarice—a moral obligation that rests upon all—upon "the women" as well as the men; but it is a duty, we are sorry to say, that is cultivated very little, even among those who preach the most, and regard themselves as examples in most matters. "Teach the women to save," is a good enough maxim to be inserted in the next edition of "Poor Richard's Almanac."

MEN'S EYES WILL WANDER.—Show but a strip of white stocking above your boot, or a bit of an embroidered skirt, or a Balmoral, and you may lead a New Yorker by the nose all over Manhattan, though all Wall street stand waiting for him. I have positively seen gentlemen standing at the ferry gates when their arms were half broken with bundles, eagerly bobbing their heads this way and that, to catch a sight of the gaiter boots as they alighted from the various omnibuses.—And not all young men either, but grey-headed old codgers, who had grandpa written all over them. "Why should a woman care about it, if her ancles be pretty?" Care? It may be just possible that if an exhibition is fore-ordained and inevitable, she may prefer to choose her audience.—*Fanny Fern.*

## DOMESTIC RECIPES.

KEEPING AND SETTLING COFFEE.—The following appears valuable: "For 1 pound of coffee take one egg and beat it well. When the coffee is nicely browned and cool enough not to cook the egg, pour the egg over it, stirring it until every kernel is coated with a varnish, and let it stand a few minutes in a warm place until it dries. This will prevent the escape of all aroma, is not affected by moisture, and the egg helps settle the coffee when it is ground and steeped."—[This is the good old way of our grandmothers.]

TO WASH MERINOES.—An old merino may be made to look as good as new by first ripping to pieces the skirt, and afterwards washing each breadth separately in warm suds, being careful to rinse only in clean warm water suds. Cold water after warm will shrink any kind of woolen goods. Iron while quite damp on the wrong side. Afterwards fold once double on the right side, placing over it a clean newspaper, and iron with a very hot flat iron, in this way making the seam fold in all new double-folded goods.

TO MAKE GOOD SOAP.—Pour four gallons of boiling water over six pounds of washing soda and three pounds of unslacked lime; stir the mixture well and let it settle until it is perfectly clear. It is better to let it set all night, as it takes some time for the sediment to settle. When clear, drain the water off, put six pounds of fat with it, and boil for two hours, stirring it most of the time. If it does not seem thin enough, put another bucket of water on the grounds, stir and drain off, and add as is wanted to the boiling mixture. Its thickness can be tried by putting a little on a plate to cool occasionally. Stir in a handful of salt just before taking off the fire. Have a tub ready soaked to prevent the soap from sticking, pour it in and let it set till solid, when you will have from the above quantity of ingredients, *forty pounds of nice white soap, at a cost of about two cents per pound.* Housekeepers, try it!

BLACKBERRY WINE.—There is no wine equal to the blackberry wine when properly made, either in flavor or for medicinal purposes, and all persons who can conveniently do so, should manufacture enough for their own use every year, as it is invaluable in sickness as a tonic, and nothing is a better remedy for bowel diseases. We therefore give the receipt for making it, and having tried it ourselves, (so said the correspondent who furnished the receipt for the *Telegraph* a year ago,) we speak advisedly on the subject:

"Measure your berries and bruise them; to every gallon adding one quart of boiling water. Let the mixture stand twenty-four hours, stirring occasionally; then strain off the liquor into a cask, to every gallon adding two pounds of sugar; cork tight, and let stand till the following October, and you will have wine ready for use, without farther straining or boiling. This makes a most excellent and palatable wine."

TO CLEAN BLACK GRATES, HEARTHES, SIDES, &c.—Boil a quarter of a pound of the best black lead in a pint of weak vinegar and water, adding a teaspoonful of brown sugar and a bit of soap about the size of a walnut. When this is melted, first brush off all the dust and soot, and then with a painter's brush wet the grate, etc. As soon as it begins to dry rub to brightness with a stiff brush, such as shoes are polished with.

BEDBUGS—SALT THEM.—A lady writes the *Texas Christian Advocate* that salt is a sure thing on bedbugs. Wash the articles and places infested with the bugs with salt and water, and fill cracks and crevices where the vermin hide—they will give no more trouble. They cannot abide where salt is.

TO REMOVE SUNBURN.—Milk of almonds made thus: Take of blanched bitter almonds half an ounce, soft water half a pint; make an emulsion by beating the almonds and water together, strain through a muslin cloth, and it is made.—*Above from Germantown Telegraph.*



## RECEIVED.

"THE PEN AND PENCIL"—a new illustrated weekly—a journal of light and entertaining literature for general recreation and amusement—only 10 cents a copy, and worth it. Published by T. R. Dawley & Co., N. Y., and for sale at all the bookstores.

TEMPERANCE IN CONGRESS. "Ten-Minute speeches" by Hons. Schuyler Colfax, Henry Wilson, Richard Yates, William E. Dodge, Hiram Price, Samuel McKee, F. E. Woodbridge, J. B. Grinnell, and J. W. Patterson, delivered at the First Meeting of the Congressional Temperance Society, Washington, D. C., with a list of Pledged Members. New York: S. R. Wells, Publisher, 389 Broadway, N. Y. Price 25 cents.

THE LITTLE CORPORA! for August contains: Chapter 2 of "Camp Bruce," a splendid story, by Mrs. Miller, the Associate Editor; No 1 of "The Chicken Little Stories," by Edward Eggleston; "Science for Children," by Prof. Hooker, of Yale College; Music, by the famous Geo. F. Root: and a large number of other articles by the best writers. Price \$1 a year. Address Alfred L. Sewell, Publisher, Chicago Ill.

SCHEDULE OF PREMIUMS of the Seventh Fair of the St. Louis Agricultural and Mechanical Association, received from W. McPherson, Jr., Esq., This fair will be held at St. Louis, begins on Monday the 7th of October, 1867, and continues for six days. The premiums liberal, amounting to \$25,000 in all. Competition is invited from the whole Union. No entry fee charged. Arthur B. Barret, President, G. O. Kalb, Secretary.

CG—Constitution and By Laws of the Maryland Mutual Horse Thief Detecting and Live Stock Insurance Co., of Buckeystown, Frederick Co., Md. This is a new organization recently chartered for insuring Live Stock against Death and Theft, and is started under favorable auspices. Address Wm. G. Baker, Secretary, Buckeystown, Md.

Catalogues from Hoopes, Brother & Thomas, of Cherry Hill Nurseries, West Chester. Pa. These Catalogues embrace every description of Fruit and Ornamental Trees, Shrubs, Vines, Roses, Herbaceous and Hedge Plants, &c.

Received Circulars from Jacobs Brothers, of Columbus, Ohio, manufacturers of Jacobs' Patent Clarifier and Evaporator, both stationary and portable, for converting Cane into Syrup and Sugar.

THE HERALD OF THE TRUTH AND LADIES' HOME MAGAZINE—A monthly periodical, devoted to morality and religion. The contents of the July number is as follows: Lives of the Apostles—Letters to a Candid Woman—My Mother—The Resurrection—Plan of a Sermon—The New Birth—Our Sacrifice—First Things—Mrs. Holmes' Comfort—Old and New Proverbs—What the World Owes to the Bible—The Thought of Dying—The Door of Heaven—A Nursery Lesson, &c., &c. Price \$1.50 per annum. Address W. T. Horner, Buffalo, New York.

First Annual Report and Catalogue of the State Normal University, of Wilmington, Delaware. John C. Harkness, A. M., President of Faculty.

THE MASONIC REVIEW AND KEYSTONE.—The second volume of this weekly Masonic journal entered on its new year in July. It is published in Baltimore, by Wm. H. Richardson & Co., at \$4 per annum, and is well worthy the support of the Craft wheresoever dispersed.

"AMERICAN JOURNAL OF HORTICULTURE" commenced its second volume with the July number. It is a first-class monthly, edited with great ability, and got up in an unsurpassed style of typography, and cannot fail to meet with merited success. Published by Tilton & Co., Boston. Price \$3 per annum.

## EDITORIAL NOTICES.

CG—New subscribers can be furnished with *Moore's Rural New Yorker* and *Maryland Farmer* for \$3.50. The annual subscription to the "Rural New Yorker," \$3; "Maryland Farmer," \$1.50.

CG—Old subscribers can be furnished with *Moore's Rural New Yorker*, (the best weekly of its kind in this country,) by sending us \$2. Their subscriptions can begin at any time.

CG—Specimen copies, both of the "Rural New Yorker" and "Maryland Farmer," sent free on application.

CG—The *Rural New Yorker*, \$3—the *Southern Cultivator*, \$3—and the *Maryland Farmer*, \$1.50—per annum—furnished for one year for \$5. Specimen copies of either sent on application.

CG—Back numbers of the "Farmer" can only be supplied from April of 1867.

CG—The "Southern Cultivator," the leading agricultural monthly South, price \$2 per annum, and the "Maryland Farmer," price \$1.50, furnished both at \$3 per annum.

CG—Correspondents should always give their Postoffice, County and State at the top of their letters, and write their names legibly.

## FERTILIZERS FOR FALL USE.

We call attention to the following Fertilizers advertised for sale in this number of the "Farmer."

"Excelsior"—No. 1 Peruvian Guano and Soluble Phosphates—J. J. Turner & Co., 42 Pratt Street, Baltimore.

Super-Phosphate—(Dissolved Bones)—and E. Frank Coe's Super-Phosphate—J. J. Turner & Co., Baltimore.

Soluble Pacific Guano—John S. Reese & Co., agents, Baltimore, Md. Also agents for Flour of Bone.

Rodunda Guano—Peruvian Guano—Wm Crichton & Son, Bowly's Wharf, Baltimore.

Peruvian Guano—John Merryman & Co., Baltimore. Fish Guano—James Pryer & Co., 190 Front street, N. Y.

Andrew Coe's Raw Bone Phosphates—Herbert & Hairston, agents, 10 Camden street, Baltimore—also sold by Banks, Slingluff & Co., Pratt street.

Baugh's Raw Bone Phosphate—George Dugdale, agent, 105 Smith's wharf, Baltimore.

Moro Phillips' Super-Phosphate of Lime—Agency No. 59 South Street, Baltimore.

Lister's Fresh Bone Super-Phosphate of Lime—Samuel Townsend & Son, agents, 52 Light street, Baltimore.

Fine Ground Bone, Poudrette, &c.—Thos. Baynes & Son, 139 McElderry's Wharf, Baltimore.

Ground Bones—Joshua Horner, manufacturer, corner of Chew and Stirling streets, Baltimore.

## LIFE.

BY G. R. APPLEBY, OF BALTIMORE.

As we grow older,  
Friends become colder,  
And we feel that friendship's indeed but a name;  
Our hopes of the morrow  
Are clouded by sorrow,  
To-day and to-morrow we find but the same.

What is this strife,  
This battle of life,  
But a constant succession of trouble and pain?  
We journey along,  
Mid the glittering throng;  
To-day and to-morrow we find but the same.

And so 'twill be ever,  
'Till death shall dis sever  
The soul that unites us as onward we roll;  
We look for new joy—  
Life's a bumble, a toy;

To-day and to-morrow we find but the same,  
From Sunday (Baltimore) Courier.